THE CLASSICAL **QUARTERLY**

EDITED BY

G. T. GRIFFITH, M.A.

AND

D. L. PAGE, M.A.

BOARD OF MANAGEMENT

J. D. DENNISTON, M.A., F.B.A. (Chairman), representing the Oxford Philological Society

K. J. MAIDMENT, M.A. | Representing the PROF. R. G. AUSTIN, M.A. PROF. E. H. WARMINGTON, M.A. (Hon. Treas.) F. H. SANDBACH, M.A. (Hon. Sec.)

Classical

PROF. D. S. ROBERTSON, M.A., F.B.A., representing the Cambridge Philological Society

With the co-operation of

PROF. B. D. MERITT, Institute for Advanced Study, Princeton; PROF. J. A. FITZHERBERT, University of Adelaide; and PROF. HOMER A. THOMPSON, University of Toronto

VOLUME XLII

OXFORD AT THE CLARENDON PRESS LONDON: GEOFFREY CUMBERLEGE 1948

Oxford University Press, Amen House, London E.C. 4
GLASGOW NEW YORK TORONTO MELBOURNE WELLINGTON
BOMBAY CALCUTTA MADRAS CAPE TOWN
Geoffrey Cumberlege, Publisher to the University

Aesch

Thucy

Style On No

The A

The N Suppl

HE

The T

Thuc

Was Elisio

Sophe

Notes

PRINTED IN GREAT BRITAIN

TABLE OF CONTENTS

NUMBERS 1, 2

Aeschylea. Ĥ. D. Broadhead			I
Notes on Ammianus Marcellinus. E. L. B. MEURIG DAVIES			7
Thucydides Notes. A. W. GOMME			10
South Italian Vases and Attic Drama. T. B. L. Webster			15
Style and Thought in Plato's Dialogues. DOROTHY TARRANT			28
On Negativing Greek Participles, Where the Leading Verbs are Require $\mu \dot{\eta}$. A. C. MOORHOUSE	of a Ty	pe to	35
The Author of PsGalen's Prognostica de Decubitu. S. Wein	STOCK		41
Aristotle's Teleology and Uexküll's Theory of Living Nature. Helene Weiss			44
The Name of the Euxine Pontus Again. A. C. MOORHOUSE			59
Supplementary Note on the Name of the Black Sea. W. S. Ar	LEN		60
NUMBERS 3, 4			
Place-Names and the Date of Aristotle's Biological Works. H	. D. P.	LEE	61
The Trisyllabic Ending of the Pentameter: Its Treatment by Treopertius, and Martial. G. A. WILKINSON	ibullus •	,	68
Thucydides, Isocrates, and the Rhetorical Method of Compositi HUDSON-WILLIAMS	on. H	. LL.	76
Was the Neronia a Freak Festival? J. D. P. Bolton .			82
Elision of Atque in Roman Poetry. M. PLATNAUER			91
Enniana, II. O. Skutsch			94
Sophoclea. A. Y. CAMPBELL			102
Two Manuscripts of Statius' Thebaid. R. D. WILLIAMS .			105
Notes on Ammianus Marcellinus. E. L. B. MEURIG DAVIES			113

THE

THE CLASSICAL QUARTERLY and CLASSICAL REVIEW are the organs of the Classical Association. For the present, THE QUARTERLY will be published in two DOUBLE numbers in April and October; the times of publication of THE REVIEW are variable under prevailing conditions

THE CLASSICAL QUARTERLY

EDITED BY

G. T. GRIFFITH, M.A., Gonville and Caius College, Cambridge
D. L. PAGE, M.A., Christ Church, Oxford

BOARD OF MANAGEMENT

J. D. DENNISTON, M.A., F.B.A. (Chairman), representing the Oxford Philological Society

Prof. R. G. AUSTIN, M.A.
Prof. E. H. WARMINGTON, M.A. (Hon. Trens.)

Representing the Council of the Classical Association

Prof. D. S. ROBERTSON, M.A., F.B.A., representing the Cambridge Philological Society

With the co-operation of Prof. B. D. MERITT, Institute for Advanced Study, Princeson; Prof. J. A. FITZHERBERT, University of Adelaide; and Prof. HOMER A. THOMPSON, University of Toronto

Volume XLII

JANUARY-APRIL 1948

Numbers 1, 2

CONTENTS

AESCHYLEA. H. D. Broadhead	1
NOTES ON AMMIANUS MARCELLINUS. E. L. B. MEURIG DAVIES	7
THUCYDIDES NOTES. A. W. GOMME	10
SOUTH ITALIAN VASES AND ATTIC DRAMA. T. B. L. WEBSTER	15
STYLE AND THOUGHT IN PLATO'S DIALOGUES. DOROTHY TARRANT	28
ON NEGATIVING GREEK PARTICIPLES, WHERE THE LEADING VERBS ARE OF A TYPE TO REQUIRE μ_0 . A. C. Moorhouse	35
THE AUTHOR OF PSGALEN'S PROGNOSTICA DE DECUBITU. S. WEINSTOCK	41
ARISTOTLE'S TELEOLOGY AND UEXKULL'S THEORY OF LIVING NATURE. HELENE WEISS	44
THE NAME OF THE EUXINE PONTUS AGAIN. A. C. MOORHOUSE	59
CUIDN EMENTARY NOTE ON THE NAME OF THE BLACK SEA. W. S. ALIEN	60

OXFORD: AT THE CLARENDON PRESS

LONDON NEW YORK TORONTO MELBOURNE
GEOFFREY CUMBERLEGE: OXFORD UNIVERSITY PRESS

Price for single numbers, 5s. 6d. net (5s. 8d. post free); for double numbers, 11s. net (11s. 4d. post free). Yearly subscription 18s. post free; c. S.A. \$3.85. Combined yearly subscription for THE CLASSICAL QUARTERLY and \(\)\(\).^2E CLASSICAL REVIEW, 30s. post free; U.S.A., \$6.30

STUDIES IN ANCIENT GREEK SOCIETY

THE PREHISTORIC AEGEAN

George Thomson

This volume is planned as the first of several with the aim of consolidating the ground covered in Aeschylus and Athens. It is in effect an expansion of the first five chapters of that work, reinforcing the argument and treating at length some fundamental problems that were only touched on there, especially matriarchy, land-tenure, Aegean prehistory, and epic. Its range coincides approximately with the Bronze Age, except that the evolution of epic is followed down to its culmination in the sixth century B.C.

800 pp. 85 illustrations. 12 maps. 2 gns.

SOME PRESS OPINIONS OF AESCHYLUS AND ATHENS

'It is a serious and carefully elaborate work of scholarship which needs careful and prolonged examination a pioneer work of great importance.'

Professor T. B. L. Webster in the MANCHESTER GUARDIAN

'In support of his contention that "possibilities of further research in classical studies are limitless", Professor Thomson might justly point to the long list of occasional contributions with which he has enriched his main argument. . . . There is nothing, even where his own convictions are most directly involved, that is not stated fairly and moderately, and with sufficient historical illustration. His book is a notable example of the contribution which modern anthropological studies have to make to traditional learning, if the learned are willing to take account of them.'

Sir John L. Myres in MAN



CORRIGENDUM

In the article entitled 'Periplus Maris Erythraei: The Indian Evidence as to the Date', by J. A. B. Palmer, in the last issue (C.Q., vol. xli, Nos. 3 and 4, July/October 1947), a misprint occurred in line 9 on p. 137. Frisk's reading of the name in ch. 41 was there printed as $Ma\mu\beta\acute{a}\nu o\nu$: this should have been $Ma\nu\beta\acute{a}\nu o\nu$, the ' ν ' as third letter being the point of the reference to corruption by metathesis in line 11 on the same page.

error

willin xvi. 11 being no exa bad se (Eur. 189) θρ we hav a total apposi frag. 5. usually

to be w Son (Ahren howeve θράσος phrase 4599-1

THE CLASSICAL QUARTERLY

JANUARY—APRIL 1948

AESCHYLEA

I

In this article I have been concerned to show that some commonly accepted readings or interpretations are inadequate, to offer what I believe to be the correct interpretations, to justify these by a careful consideration of the context, and to propose corrections that give the required sense and are in accordance with well-established palaeographical canons.

The passages are classified according to the nature of the assumed palaeographical error (cf. F. W. Hall, A Companion to Classical Texts, pp. 170 ff.). The numeration is

that of the Oxford Text (Murray).

II. MISTRANSCRIPTION OF WORDS THROUGH GENERAL RESEMBLANCE, CONFUSION, OR TRANSPOSITION OF LETTERS

Such mistranscriptions are exceedingly common and may arise from a combination of the above-mentioned causes.

(i) Agamemnon, 799 ff.

σὺ δέ μοι τότε μὲν στέλλων στρατιὰν 'Ελένης ἔνεκ', οὐ γάρ <σ'> ἐπικεύσω, κάρτ' ἀπομούσως ἦσθα γεγραμμένος, οὐδ' εὖ πραπίδων οἴακα νέμων θράσος ἐκούσιον ἀνδράσι θνήσκουσι κομίζων.

The Chorus wish to be sincere in their welcome to the King. They do not hesitate to tell him that in their view he was utterly misguided in launching the expedition to recover Helen; but now that he has returned successful, they can give him a friendly and hearty welcome.

For the corrupt θράσος ἐκούσιον Verrall, with one manuscript, reads θάρσος ἐκούσιον, 'willing wanton'. This ingenious rendering is strongly defended by Headlam (C.R. xvi. 116-17), who quotes numerous examples of words like θράσος, στύγος, μῖσος, etc. being used in a personal sense; but a careful study of the passages will, I think, show no exact parallel to θάρσος ἐκούσιον, even if it be granted that θάρσος was used in a bad sense, which is at least very doubtful. In ὧ βάρβαρον σὺ θρέμμα καὶ σκληρὸν θράσος (Eur. Andr. 261) θράσος is a vocative: in κρατοῦσα (γυνή) οὐχ ὁμιλητὸν θράσος (Sept. 189) θράσος forms the complement after ἐστίν understood. In both passages, therefore, we have a person identified with the quality denoted by the abstract noun. Out of a total of 27 examples quoted by Headlam 7 are vocatives, while 14 are cases of apposition, e.g. μητέρα θεῶν στύγος (Choeph. 1027-8), Κύπριδος μίσημ' ᾿Αταλάντη (Eur. frag. 530. 4). As for the other six, suffice it to say at present that I can find in them nothing to support Verrall's interpretation. Furthermore, a qualifying adjective is usually in itself opprobrious, e.g. σκληρὸν θράσος, δύσθεον μίσημα, etc. ἐκούσιον seems to be without parallel, and in any case to be an otiose epithet as applied to a wanton.

Some editors understand by θράσος 'courage', and alter ἐκούσιον to ἐκ θυσιῶν (Ahrens) or ἐτώσιον (Wecklein), 'bringing courage to dying men'. There seems, however, to be little authority for this meaning of the verb (afferre), and even if θράσος κομίζων is unexceptionable Greek for 'bringing courage' to someone, such a phrase is altogether unsuitable to the context. In the corresponding participial clause 4590-18

τότε μὲν στέλλων στρατιὰν Ἑλένης ἔνεκα (799–800) we are given a reason for the Chorus' disapproval, viz. the fitting out of an expedition for the sake of one woman. We expect the second participial phrase to describe another blameworthy action, such as the sending of so many men to their death. If this is granted, we should, with Verrall, take ἀνδράσι θνήσκουσι as instrumental dative, as with words signifying purchase, 'with dying men'. In that case the possible meanings of κομίζων here would seem to be these: (i) 'recover', as in Eur. Supp. 273 τέκνων κομίσαι δέμας, and in other passages quoted by Verrall, 'spending the lives of men to recover (Helen)'; (ii) 'secure', 'win', with some such object as ἔπαινον (Soph. O.C. 1411), or νίκας (Pindar, Nem. 2. 30): in this case the meaning would be 'striving to secure glory, or victory, at the cost of dying men'; (iii) 'gather' (καρπόν or the like, cf. Herod. 2. 14), which, metaphorically used, would be a suitable phrase for the inglorious 'harvest' of dead or dying men.

Since Helen has already been mentioned in line 800 as the person on whose account the expedition was sent out, a reference to dying men naturally suggests that they were the price that had to be paid for victory, and this view is strongly supported by the words of the Chorus in 447 ff., where there is a striking similarity both of thought and of diction: the human slaughter (τὸν ἐν φοναῖς . . . πεσόντα 447, ἀνδράσι θνήσκουσι 804) for Helen's sake (ἀλλοτρίας διαὶ γυναικός 448, Ἑλένης ἔνεκα 800), the indignation of the people (βαρεῖα δ' ἀστῶν φάτις 456), and the strong disapproval of the Chorus (κάρτ' ἀπομούσως κτλ. 801–2). As Verrall well says, 'What the leaders have in their minds is the recent (and in truth unappeased) indignation of the people for the loss of life in the war.' Further, the Chorus (461–4) refer to the retribution that overtakes τοὺς πολυκτόνους and those that prosper unrighteously (τυχηρὸν ὅντ' ἄνευ δίκας).

The sense required in 803-4 would be given by θέρος οὐχ ὅσιον τ', the condemnatory tone of which suits the language used by the Chorus (801-2) to express their disapproval, 'seeking to gather in an unholy harvest', i.e. to attain victory by the unjustifiable sacrifice of Greek lives. θέρος οὐχ ὅσιον expresses the same thought as τυχηρὸν ὅντ' ἄνευ δίκας (464), and is further illustrated by what the Chorus says (461-2) τῶν πολυκτόνων οὐκ ἄσκοποι θεοί. Compare 1655, ἀλλὰ καὶ τάδ' ἐξαμῆσαι πολλὰ δύστηνον θέρος, where θέρος is used for the harvest gleaned by the guilty pair, i.e. the triumph won by the spilt blood of Agamemnon and Cassandra. The metaphor is a favourite one with Aeschylus: καρπὸς οὐ κομιστέος (Sept. 600), πάγκλαυτον ἐξαμῷ θέρος (Persae, 822). In the passages just quoted from Aeschylus the noun has a sinister meaning, as is shown by the adjectives δύστηνον, πάγκλαυτον. So also in the phrase θέρος οὐχ ὅσιον.

It should be noted that the cod. Farnes. reads θ άρσος, which may, of course, be a mistake for θ ράσος, but may equally well be a closer representation of an original θ έρος. If the text originally read Θ EPOCOYXOCION, its corruption to Θ APCOCEK OYCION would be due partly to confusion of letters (o, ϵ, σ) , partly to transposition (oίχ \ddot{o} σιον $> \dot{\epsilon}$ κούσιον).

I should perhaps mention the fact that I had arrived at the conjecture $\theta \epsilon \rho o s$ οὐχ οσιόν τ ' before I learned that Maehly had suggested $\theta \epsilon \rho o s$ οὐ ρύσιον.

(ii) Septem, 74-5

έλευθέραν δε γην τε καὶ Κάδμου πόλιν ζυγοίσι δουλίοισι μήποτε σχεθείν.

Eteocles prays that the city of Cadmus may continue free and never bow to the yoke of slavery. Such clearly is the meaning of these two lines, but the difficulty is to make the Greek yield it without violence to idiom or grammar.

Paley explains $\sigma_{\chi\epsilon}\theta\epsilon\hat{\imath}\nu$ by supplying $\tau o \hat{\imath}s$ $\pi o \lambda\epsilon \mu lovs$, i.e. 'Grant, ye Gods, that the enemy may never hold the city of Cadmus in the yoke of slavery'. It is surely impossible to 'supply' $\tau o \hat{\imath}s$ $\pi o \lambda \epsilon \mu lovs$; there is nothing in what precedes to prepare us for such a construction.

the of kal mas da land hold the v

'Yield amon It

readininfinit I shall are—
Pyth.

ἐλπίσι both doubt comm future 'Do no we fine all refe case a priate

Ag

be poi

Heave

always

In α a subject of a property which was the scholium original καίνισον εἴκειν (I

(i) A (ii) I

πύργους (pp. 16 f (iii)

> (48, 167) χθονός (1

έλευθέραν δ' ἀνητε καὶ Κάδμου πόλιν

'Yield not the free town of Cadmus to the possession of a slavish yoke' (καί also, among other Greek cities). This reading raises as many difficulties as it solves.

It seems to me that there is only one possible translation of the manuscript reading, viz. 'Do not hold the land and city of Cadmus in slavish yokes', where the infinitive is equivalent to an imperative. (That it cannot be the infinitive of prayer I shall argue presently.) Are there any objections to such a rendering? I think there are—(i) one expects the preposition εν with ζυγοίσι, as in εν φυλακά σχεθείν (Pindar, Pyth. 4. 134). Compare Jebb's note on Sophocles, Trach. 137, where he remarks that έλπίσιν ἴσχειν is unusual for εν ελπίσιν ἴσχειν. In Homer χερσίν and εν χερσίν έχειν are both found, but, as Monro says (Homeric Grammar, p. 139), the simple dative is doubtless locatival. (ii) Eteocles implores the Gods, 'Save us . . . help us', i.e. the commands relate to the immediate situation; 'Never hold us in slavery' refers to the future, and comes in strangely between the other two commands. We should expect 'Do not enslave us' rather than 'Never hold us in slavery'. In Eur. Heracl. 313 ff. we find an infinitive of command between two imperatives, but there the commands all refer to the same time, not partly to future and partly to present time. In any case a command to the Gods not to hold the city in slavery is far from being appropriate; the phrase ζυγοῖσι δουλίοισι σχεθεῖν is properly said of the enemy.

Against the view of those who take $\sigma_{\chi} \epsilon \theta \epsilon \hat{\imath} \nu$ to be the infinitive of prayer it must be pointed out that this construction is used only when the petitioner calls upon Heaven to grant that something may or may not happen, and that there is nearly

always present a subject-accusative. Examples are:

Ζεῦ πάτερ, ἢ Αἴαντα λαχεῖν ἢ Τυδέος υἰόν (Iliad, 7. 179) θεοὶ πολῖται, μή με δουλείας τυχεῖν (Sept. 253)

In our passage $\pi \delta \lambda \nu$ must be the object of $\sigma \chi \epsilon \theta \epsilon \hat{\iota} \nu$, and it is impossible to 'supply' a subject-accusative such as $\tau \sigma \hat{\iota} s$ $\pi \delta \lambda \epsilon \mu \hat{\iota} \sigma v$. If the thought is expressed in the form of a prayer or wish with the infinitive, $\pi \delta \lambda \nu$ must be the subject of the infinitive, which would then have to be a verb meaning 'fall under', 'bow to', or the like. This was the view of Heimsoeth, who conjectured $\hat{\epsilon} \nu \tau \nu \chi \epsilon \hat{\iota} \nu$, and it is supported by the scholium $\hat{\iota} \pi \epsilon \lambda \theta \epsilon \hat{\iota} \nu$ (correction of $\hat{\iota} \pi \epsilon \xi \epsilon \lambda \theta \epsilon \hat{\iota} \nu$), which, according to Paley, points to an original $\hat{\epsilon} \mu \pi \epsilon \sigma \epsilon \hat{\iota} \nu$ or $\hat{\epsilon} \nu \sigma \chi \epsilon \theta \epsilon \hat{\iota} \nu$. I suggest $\hat{\epsilon} \iota \kappa a \theta \epsilon \hat{\iota} \nu$ and compare $\hat{\epsilon} \iota \kappa \sigma \nu$ dual $\hat{\iota} \nu \tau \gamma \delta \nu$ (Agam. 1071) and such phrases as $\hat{\epsilon} \iota \kappa \epsilon \nu \nu$ kako $\hat{\iota} s$ (P.V. 320), $\sigma \nu \mu \phi \rho \rho a \hat{\iota} s$ $\hat{\epsilon} \iota \kappa \epsilon \nu$ (Eur. Supp. 167).

It remains to consider the other three objections to the manuscript reading.

(i) As Verrall says, γην is redundant and Κάδμου misplaced.

(ii) In this play we find ἐπώνυμον Κάδμου πόλιν (135), πόλισμα Κάδμου (120), Κάδμου πύργουs (823), but never Κάδμου γῆν. Compare what Verrall says in his introduction (pp. 16 ff.) about the Cadmean citadel.

(iii) Where the land of the Cadmeans is mentioned, we find τήνδε χθόνα or $\gamma \hat{\eta} \nu$ (48, 167, 587), $\gamma \hat{a}s$ έμ $\hat{a}s$ (83), πατρίs or πατρώα γα $\hat{a}a$ (585, 640), and once Καδμείων χθονός (1015).

horus'

a. We

uch as

, with

uifying

would

other

ecure',

2. 30):

cost of

rically

men.

iought iσκουσι tion of (κάρτ' minds of life es τοὺs

natorv

ccount

t they

ted by

disapjustifiτυχηρον -2) τῶν δστηνον riumph yourite Persae, ning, as ὅσιον. arse, be original COCEK

έρος οὐχ

osition

to the culty is

ely im-

pare us

The term 'land' $(\gamma \hat{\eta}, \chi \theta \acute{\omega} \nu)$ is used in two ways: (a) as including the πόλιs itself and the land around the city, e.g. $\gamma \hat{a}s$ $\tau \hat{a}\sigma \delta \epsilon$ πυργοφύλακες (167), $\theta \epsilon o \grave{v}s$ πατρώας $\gamma \hat{\eta}s$ (640, cf. 585), ἀναστατ $\hat{\eta}\rho a$ Καδμείων $\chi \theta o \nu \acute{o}s$ (1015); (b) the πεδία as opposed to πόλις, e.g. $\gamma \hat{a}s$ πεδία (83), $\gamma \hat{\eta}\nu$ τήνδε φυράσειν (48), where $\gamma \hat{\eta}\nu$ τήνδε is opposed to ἄστυ Καδμείων (compare 900 ff. where we find πόλιν . . . πύργοι . . . πέδον, and 271–2 where the χώρας θεοί are distinguished as πεδιονόμοι and ἀγορ $\hat{a}s$ επίσκοποι; see Paley ad loc.). In the passages under (b) there is evident point in the contrast between $\gamma \hat{\eta}$ and πόλις; in lines 74–5 $\gamma \hat{\eta}\nu$ τήνδε or Καδμείων χθόνα would be the phrases to expect if the speaker meant that the whole land (including the πόλις) was to escape slavery. It seems tolerably clear that the πόλις alone was in his thoughts, since the word occurs three times between γ 1 and γ 7, so that $\gamma \hat{\eta}\nu$ is almost certainly corrupt.

One may further note that when the Cadmean city $(\pi \delta \lambda \iota s, \ \tilde{\alpha} \sigma \tau \nu)$ is referred to, we find even more frequently than the 'city of Cadmus' $(K \delta \lambda \mu \iota \nu \ \pi \delta \lambda \iota \nu)$ the 'city of the Cadmeans' $(K \delta \mu \iota \nu \ \pi \delta \lambda \iota \nu)$ or the 'Cadmean city' $(K \delta \mu \iota \iota \nu \ \pi \delta \lambda \iota \nu)$; see lines 9, 47, 531, 1006, 1075. In one place (1006) the demonstrative $\tau \hat{\eta} \sigma \delta \epsilon$ accompanies $\pi \delta \lambda \nu$.

Perhaps the line originally ran

έλευθέραν δὲ τήνδε Καδμείων πόλιν

If so, $Ka\delta\mu\epsilon l\omega\nu$ may have been supplanted by $K\acute{a}\delta\mu o\nu$ because $\kappa a\acute{\iota}$ crept in from the preceding line, so that $Ka\delta\mu\epsilon i\omega\nu$ would naturally be reduced to $K\acute{a}\delta\mu o\nu$. Such a reduction would in any case be easily possible if the termination $-\omega\nu$ was indicated by a sign of abbreviation, which later disappeared, leaving $Ka\delta\mu\epsilon\iota$ to be read as $K\acute{a}\delta\mu o\nu$ ($\epsilon\iota$ and $o\nu$ being at times almost indistinguishable). Once $K\acute{a}\delta\mu o\nu$ was established, $\tau\acute{\eta}\nu\delta\epsilon$ would easily become $\gamma\widetilde{\eta}\nu$ $\tau\epsilon$.

In the other dramatists too we constantly find the demonstrative with $\pi\delta\lambda\iota s$, $\gamma\hat{\eta}$, $\chi\theta\omega\nu$, e.g. Eur. Alc. 476, Heracl. 206, 461, Soph. Antig. 994, O.T. 54.

(iii) Suppliants, 272

γένος τ' αν έξεύχοιο καὶ λέγοις πρόσω

The manuscripts give λέγοι πρόσως, altered by Robortello to λέγοις πρόσω, which has been widely accepted. Even Housman seems to approve (Journal of Philology, xvi. 249), since he mentions the emendation merely to illustrate a very common transposition of letters. It apparently did not occur to him that λέγοις πρόσω is a phrase scarcely appropriate to the context. It did occur to Tucker (see his note ad loc.), since he emends λέγοι πρόσως to λέγοι τορώς. In order, however, to sustain λέγοι τορῶs he has to make other quite arbitrary alterations. So, though Tucker was rightly dissatisfied with λέγοις πρόσω, he failed to make the correct diagnosis. He assumed that $\tau o \rho \acute{o}s$ of line 274 implied $\tau o \rho \acute{o}s$ in 272, whereas it is much more probable that $\sigma\pi\epsilon\rho\mu\alpha$ of lines 275 and 290 implies a corresponding word in 272. The last line of the King's speech is quite sufficient to account for the words $\beta \rho \alpha \chi \dot{\nu} s$, $\tau o \rho \dot{\nu} s$. The text, as emended by Robortello, is taken to mean, 'Declare your race and speak further', i.e. tell me about your race and then proceed with the rest of your story. This makes quite good sense, but as a rendering of the Greek is open to two objections: (i) the natural meaning of λέγειν πρόσω, as we see from Soph. Elec. 213 (μὴ πόρσω φωνείν), is 'to continue speaking'. You have already spoken, you are interrupted, and are then invited to continue. I cannot feel that λέγειν πρόσω is natural Greek for 'tell the rest of your story' unless there has been an interruption to the telling; (ii) the fact that the two commands are closely linked by τε and καί leads us to expect in the second command something to balance γένος. We certainly do not expect 'Both declare your race and speak further as well'. That the King wished to know two things (a) the véros of the Chorus, and (b) their descent $(\sigma \pi \epsilon \rho \mu a)$ we gather from the Chorus' reply, Άργεῖαι γένος | έξευχόμεσθα σπέρμα τ' εὐτέκνου βοός (Tucker's

σπέρη (289– (γένει Consi Chori equiv nume 279), deduc For t

In appro τε and

'Decla
μὲν δή
corrup
Fo

163 ; Choeph

(C

Mo from t and D hospita

ξένοις',

mainta

Oreste

on som to strat who kr in view to be i assumi possess knows a differ remark drawing masterl

about to Ores σπέρμα τ' for σπέρματ' is surely right, cf. 290), and from the King's request later on (289–90) that the Chorus should tell him how they were of Argive stock and blood (γένεθλον σπέρμα τ'). So in Soph. O.C. 214 the Chorus asks Oedipus τίνος εἶ σπέρματος; Consequently, I think the conclusion all but irresistible that the King asked the Chorus τ ό τ ε γένος εξεύχεσθαι καὶ τ ὸ σπέρμα. σπορά seems the only metrically suitable equivalent here for σπέρμα, and I believe that σπορᾶς was corrupted to προσας (for numerous examples of this kind of transposition see Housman, loc. cit., pp. 249, 253, 279), and then to προσως (a and ω being commonly confused). λόγον can easily be deduced from λέγοι, so that the line will now run γένος τ ἄν εξεύχοιο καὶ λόγον σπορᾶς. For this use of λόγος cf. Xen. Mem. 2. 7. 13 ὁ τοῦ κυνὸς λόγος.

In favour of this reading it may be said (i) that it gives the sense that seems most appropriate to the context; (ii) the verb $\epsilon \xi \epsilon i \chi_{0i0}$ has now two accusatives linked by $\tau \epsilon$ and $\kappa \alpha i$; (iii) $\lambda \delta \gamma_{0i}$ prepares the way for $\delta \eta_{0i}$ in the following line:

μακράν γε μέν δη ρησιν οὐ στέργει πόλις.

'Declare the story of your descent, but let it not be a long one.' The particles $\gamma \epsilon$ $\mu \epsilon \nu \delta \dot{\eta}$ in line 273 do not have the adversative force the context requires, and I suspect corruption.

For the meaning of σπορά cf. P.V. 871, Ajax, 1298.

III. INTRODUCTION OF PROPER NAME

(Cf. F. W. Hall, op. cit., p. 182, where he quotes an example from Eur. Heracl. 163; τί ρυσιασθείς was corrupted to Τιρυνθίοις θῆς).

Choephoroi, 653-6

παι παι, θύρας ἄκουσον έρκείας κτύπον.
τίς ἔνδον, ὧ παι, παι, μάλ' αιθις, ἐν δόμοις;
τρίτον τόδ' ἐκπέραμα δωμάτων καλῶ,
εἴπερ φιλόξεν' ἐστὶν Αἰγίσθου διαί.

Orestes is knocking at the door of the royal palace, and impatiently calls on the olkérns to come forth. He calls three times before the door is opened.

Most editors regard $\delta\iota a\iota$ as corrupt. 'The poet would not have used $\delta\iota a\iota$ except from the necessity of the metre' (Paley). Verrall's defence is far-fetched. Klausen and Dindorf read $Ai\gamma\iota \sigma\theta\sigma \upsilon \beta\iota a$ (for the periphrasis cf. 893), 'if Aegisthus keeps a hospitable one'. Those that keep $\delta\iota a\iota$ understand, 'si per Aegisthum licet esse $\phi\iota \lambda \upsilon \varepsilon \varepsilon \upsilon \iota$, i.e. as Verrall puts it, the question is whether, under Aegisthus, the house maintains its reputation. There seems to be no exact parallel for this use of $\delta\iota a\iota$.

Whatever the reading, the meaning is practically the same: 'A third time I call on someone to come forth from the house, if (that is to say) Aegisthus opens the house to strangers.' The conditional clause gives quite good sense—to us (or the spectators) who know that Aegisthus is master of the house, and that, at the moment, especially in view of the terror caused by Clytemnestra's dream (527), Aegisthus is not likely to be in a mood for hospitality (cf. 566 δαιμον $\hat{\alpha}$ δόμος κακο $\hat{\alpha}$ s). But are we right in assuming that Aeschylus represents the stranger knocking at the palace door as possessed of this knowledge? Of course, the Orestes who speaks to the Chorus (554 ff.) knows how distraught the inmates of the palace are; but the Orestes of that scene is a differently drawn character from the Daulian stranger of this. As Verrall well remarks (on line 565 of his edition), 'Nothing is more remarkable, in the character-drawing of the play, than the contrast between the Orestes of this tirade and the cool, masterly performer of the next scene.' It is important, therefore, to be quite clear about the knowledge the stranger may be presumed to possess.

Orestes is concerned to appear at the palace as a stranger (ξένω εἰκώς, 560), bearing a message from Strophius to Orestes' parents (πρὸς τοὺς τεκόντας, 681). He is, to judge

read as ιου was h πόλις,

his itself

οώας γης to πόλις,

Καδμείων

ne χώρας

In the

τόλις: in

speaker

t seems

irs three

erred to.

'city of

lines 9,

es πόλιν.

in from

v. Such

ndicated

which chilology, common σσω is a his note o sustain cker was ssis. He probable last line σσω. The d speak

ections: η πόρσω rrupted, al Greek telling;

ir story.

t expect to know her from Tucker's

o expect

by his words, very vague about the identity of those he is addressing (εὶ δὲ τυγγάνω τοῖς κυρίοισι . . . λέγων οὐκ οἶδα, 688-90), and when he speaks of his royal hosts it is always in the most general terms (τοῖσι κυρίοισι δωμάτων, 658, ξένοισιν ὧδ' εὐδαίμοσι, 700). In line 681 the plural τοὺς τεκόντας implies ignorance of Agamemnon's death, and τὸν τεκόντα 'a parent' (690) is also a vague term, applicable either to Agamemnon or to Clytemnestra. It cannot, then, be assumed that the stranger, qua stranger, knew of Agamemnon's fate and Aegisthus' usurpation. We, or the spectators, should naturally think that everyone in Greece would know of the tragedy that befell the leader of the Trojan expedition. Aeschylus, however, has chosen to make the stranger appear ignorant of this. He (ὁ ξένος) speaks of Strophius, to whom Orestes had been entrusted, as ἀγνὼς ἀνήρ, 677. It should be noticed how careful Strophius is to impress the message on this stranger: $\pi \alpha \nu \delta i \kappa \omega s$ $\mu \epsilon \mu \nu \eta \mu \epsilon \nu \sigma s$, $\mu \eta \delta \alpha \mu \hat{\omega} s$ $\lambda \acute{a} \theta \eta$, 681-2. He must tell the parents that Orestes is dead. One might reasonably suppose from the emphasis that the Δαυλιεύs had never heard of Orestes. Is it not surprising that Strophius should convey such important news through a stranger so casually met? In fact, this speech of Orestes is unintelligible except on the assumption that Aeschylus has made him tell a cock-and-bull story that raises no doubts in Clytemnestra's mind only because she is in a nervous state following upon the dream.

Is it to be supposed, then, that a stranger who knows so little about the royal household, who never refers to them by name, and who is clearly conveying the impression that Orestes' 'parents' are the persons to whom he is to give Strophius' message, would, in seeking admittance to the palace, betray a knowledge out of keeping with his bearing throughout the whole scene? It is possible, of course, to say that even Homer nods: Orestes has made a slip. Or it may be said that the conditional clause is spoken sotto voce, not being intended for the ears of the $olket\eta s$. I cannot believe this; the clause is not at all suitable for Orestes to be muttering under his breath. He knows very well that Aegisthus cannot be anxious to entertain strangers (cf. 566 quoted above), and this constitutes a real difficulty for one desirous of gaining admission to the palace. How he proposes to deal with it is explained in 567 ff. It is therefore pointless to make 656 an 'aside'.

Is it not much more probable and natural that all four lines (653–6) express to the door-keeper the stranger's impatience to have the door opened for the ostensible purpose of delivering his message? I believe that for Αἰγίσθου διαί we should substitute words expressing a command to open the door, and this command will be a fitting climax to the knocking (652), the inquiry as to who is within (654), and the summons for someone to come forth (655). 'In the name of Zeus Xenios open the door:'

είπερ φιλόξεν' ἐστίν, οἰγέσθω θύρα.

οἰγέσθω could quite easily be read as Aἰγίσθον by an inattentive scribe, especially as Aegisthus was mentioned in line 570 as likely to refuse admission to strangers. If Aἰγίσθον crept into the text, a preposition would be necessary to give the noun a construction. In minuscules θύρα would not be very different from διια, from which by a metathesis of the last two syllables would result διαί. With this reading we should put a full-stop after καλῶ (655).

H. D. BROADHEAD.

dept

tion

Mar

seas

fons

crati

et ra

vari

Arai

for 1

effus

He 1

27. I

Amn

celsin

to ru

mede

dolor

n

n

T

I thi

15. 5

Its co

the v

purp

librar

30. 1.

perpe

tissin

merit

nı Cl

d

CANTERBURY COLLEGE, CHRISTCHURCH, N.Z.

NOTES ON AMMIANUS MARCELLINUS

14. 2. 10. nam sole orto magnitudine angusti gurgitis sed profundi a transitu arcebantur, et dum piscatorios quaerunt lenunculos, vel innare temere contextis ratibus parant, effusae legiones quae hiemabant tunc apud Siden, isdem impetu occurrere veloci. et signis prope ripam locatis, ad manus comminus conserendas, denseta scutorum conpage, semet scientissime praestruebant.

Magnitudine surprises in conjunction with angusti; of a narrow river you expect depth rather than magnitudine. Bentley proposed altitudine, an improbable corruption, and I therefore expanded to magna altitudine in my Emendations of Ammianus Marcellinus II. I would now accept magnitudine; for we find it, not only of rivers or seas at 14. 2. 15, 22. 8. 30, 22. 8. 46, 24. 1. 11, but of a fons at 23. 6. 19 'stagno effluens fons cernitur qui magnitudine aquarum inflatus...'. Neither ratibus nor Kiessling's cratibus seems adequate explanation of V's sunt ratibus; I suspect contextis luntribus et ratibus, or contextis iam ratibus. Cf. the similar 24. 4. 9 'luntribus et cumbis per varia discurrentes'. Mr. D. L. Page compares Caesar, B.G. 1. 12. 1, 'id (sc. flumen Ararim) Helvetii ratibus ac lintribus iunctis transibant'. Ammianus affects iam; for m miswritten nt, cf. 28. 1. 40 'sunt placabilis' V, 29. 4. 5 'itinerunt' V. Bentley's effuse, parant is an unnecessary change; and cf. Livy, 4. 40. 3 'occurrerent . . . effusae'. He further proposed collatis for locatis; but cf. 26. 6. 14 'ubi locata noverat signa', 27. 10. 9 'signis ilico fixis ex more'.

14. 6. 23. et quoniam aput eos ut in capite mundi, morborum acerbitates celsius dominantur, ad quos vel sedandos omnis professio medendi torpescit.

V has capite mundiorum. Gelenius' morborum is the obvious change. I suspect Ammianus wrote a stronger and finer phrase, more in keeping with the high-flown celsius dominantur. Read mundi, dolorum acerbitates. Mundi dolorum is more likely to run into mundiorum than mundi morborum; and compare 14. 8. 3 'dolorum varietati medentur', 28. 4. 34 'mederi doloribus possit internis', 25. 8. 13 'Nisibenos acerbo dolore perculsit', Cic. Verr. 2. 4. 21, 47 'acerbum dolorem'.

14. 11. 26. eademque (sc. Fortuna) necessitatis insolubili retinaculo mortalitatis vinciens fastus, tumentis in cassum, et incrementorum detrimentorumque momenta versans (ut novit), nunc erectas tumentium cervices opprimit et enervat, nunc bonos ab imo suscitans ad bene vivendum extollit.

The first hand of V gives momenta versabis, the second versabilis; Gelenius versans. I think versabilis is sound; Ammianus affects the word, employing it at 14. 11. 2, 15. 5. 15, 15. 5. 30 'ad momentum omne versabiles', 16. 8. 4 'versabilem feminam', 19. 11. 1, 26. 1. 6; of Fortune at 14. 11. 29, 23. 5. 19, 31. 10. 7, as did Curtius at 5. 8. 15. Its corruption to the pale versans is unlikely both palaeographically and emotionally; the word, like the corrupt natura of 33, occurs at an exalted moment in Ammianus' purplest patch, his prose hymn to Adrasteia and Fortune. Read momenta versabilis librans (ut novit); versabilis has absorbed librans as multiplicatis has ictibus in V at 30. 1. 21; and for momenta librans compare 22. 9. 9 'causarum momenta aequo iure perpendens', 26. 10. 10 'vitae necisque momenta pensantur', Cic. Mur. 2, 3 'diligentissime perpendenti momenta officiorum omnia', Nazarius, Pan. ad Const. 7 'omnia meritorum momenta perpendit, librat, examinat'.

18. 6. 18. amendatis procul Graiorum legatis, forsitan et necandis, rex ille longaevus, non contentus Hellesponto, iunctis Grenici et Rhyndaci pontibus, Asiam cum numerosis populis pervasurus adveniet.

Clark reads rex ille longaevus for V's rex flongaevus. I prefer rex vel longaevus; cf.

g the imtrophius' ge out of course, to that the e olkérys. nuttering entertain e desirous plained in

è τυγχάνω hosts it is

εὐδαίμοσι, n's death.

amemnon

stranger,

rs, should

befell the

estranger

had been

o impress

must tell

emphasis

Strophius

In fact.

hylus has

ra's mind

the royal

ess to the ostensible ould subd will be, and the open the

ecially as ngers. If e noun a m which we should

HEAD.

14. 11. 8 'ferebatur' for 'verebatur', 21. 3. 1 'fastare' for 'vastare', 22. 12. 7 'faticinandi' for 'vaticinandi'.

19. 2. 13. exurgebant enim terrentium paventiumque clamores.

So Heraeus for V's terrentiumque. He cites Livy, 22. 5. 4; we may add 16. 12. 37 'caelumque exultantium cadentiumque resonabat vocibus magnis'. But the phrase is stronger, and the corruption likelier, if we read territorum terrentiumque; cf. 31. 10. 14 'caedebant cadebantque nostrorum non pauci'.

23. 5. 18. ut medeamur praeteritis, et roborata huius lateris securitate re publica, quae de nobis magnifice loquatur posteritas relinquamus.

V's honorata can hardly be sound; I would take C. F. W. Mueller's roborata, with a small change which explains the corruption. Read conroborata; Cicero affects the word, and cf. 21. 2. 3 'paulatimque sese conroborans'.

25. 6. 2. proinde egredi iam coeptantes, adoriuntur nos elefantis praeviis Persae, ad quorum faetorem inaccessum terribilemque, equis inter initia turbatis et viris, Ioviani et Herculiani, occisis beluis paucis, catafractis equitibus acriter resistebant.

V has inaccessumque terribilem; G presents accessumque, PB incessumque. These look like prosaic corrections of the unfamiliar inaccessum, for which cf. 20. 7. 17 'instructioneque varia inaccessum', Apul. Metam. 4. 28 'inaccessae formositatis'. Heraeus' retention of inaccessum I can accept, but not his improbable transference of the que after terribilem; nor does terribilis seem a likely epithet of odour. The corruption would be readily explicable had Ammianus written factorem inaccessum incessumque terribilem; but the jingle is not in his manner. Further, it is not so much by gait or onset as by appearance that the elephants strike dread into man and beast; cf. 19. 2. 3 'elephantorum agmina rugosis horrenda corporibus, leniter incedebant, armatis onusta, ultra omnem diritatem taetri spectaculi formidanda, ut rettulimus saepe'; 25. 1. 14 'post hos elefantorum fulgentium formidandam speciem et truculentos hiatus, vix mentes pavidae perferebant, ad quorum stridorem odoremque et insuetum aspectum, magis equi terrebantur'; 25. 3. 11 'quos elefanti tardius praecedentes, magnitudine corporum, cristarumque horrore, pavorem iumentis incutiebant et viris'. Read factorem inaccessum aspectumque terribilem. Terribilis suits aspectus; cf. e.g. Lucret. 1. 65 'horribili . . . aspectu', Vulg. Esth. 15. 9 'terribilis aspectu'; for the type of error, compare e.g. 19. 1. 7 'praefudit' for 'praecipitem fudit', 19. 5. 3 'praecantibusque' for 'praecaute vetantibusque', 25. 1. 8 'adeptisque diffractis' for 'ademptis signis hastisque diffractis', 25.9.2 'manus tendentesque' for 'manus tendentes flentesque', 30. 1. 21 'multiplicatis' for 'multiplicatis ictibus'. c, s, t are frequently confused by V.

 5. 23. hos vero subsignanos milites debuisse melius corrigi, ad unum prolapsos errorem.

Professor Fletcher, AJP. lviii, 1937, 397, notes: 'The second hand in V gives lenius, which is possible; but mollius, which occurred to me and has been suggested by F. Walter, Berl. Phil. Woch., 1913, col. 1662, but is not mentioned by Clark, is rather more probable. Walter compares for the corruption 22. 4. 6, where V has meliores for mollius compares. For mollius compare 14. 7. 12 advocatos... adlocutus est mollius.' But mollius adloqui seems to me a very different proposition as Latin from mollius corrigere. I suspect that V's second hand thought melius corrigi odd, and altered it to the normal lenius, after 17. 13. 2 'id quoque lenius vindicari', 17. 13. 6 'lenius admonebat'. But Ammianus probably here chose a synonym of lenius, and wrote Novák's mitius; thus, 14. 9. 9 'nihilo lenius ferociens Gallus', but 14. 1. 2 'humani cruoris avida nihil mitius quam maritus'. V continually gives e for i, and at first wrote ul for ut at 16. 7. 7, as he made conlecta into contecta at 19. 2. 1. For melior, mollior, mitior confused, see Livy, 8. 21. 6, with Walters and Conway.

acri

27. 8 omis 14. 6 'caut

30. 6

lı

tanti
with
ct, an
18. 9.
'dom
to m

31. 8

copie

S

creb cavis dem tacer esse, Blon are t inma aqua for ' busq conv 'prae well Amn and

while add 'ad :

23. 6

Oxi :

16. 12. 37

icinandi'

adsurgens, retersit obrutas ruderibus fossas. Clark and Rolfe adopt Petschenig's acri nisu for the acrinio of V. Gelenius read acri animo, while Walter has proposed acri consilio. I would read acri ingenio, after 27. 8. 10 'virum acrioris ingenii', Tac. Ann. 15. 52 'consulis acre ingenium'. The omission of gen is an error congenial to V; thus, 14. 1. 1 'proquitate' for 'propinquitate', 14. 6. 25 'ab ortulus' for 'ab ortu lucis', 16. 8. 13 'possione' for 'possessione', 18. 6. 5 'cautione' for 'causatione', 22. 11. 4 'fullio, turlentis' for 'fullonio, turbulentis'.

publica. ata, with

e phrase

; cf. 31.

30. 6. 6. sensit inmensa vi quadam urgente morborum, ultimae necessitatis adesse praescripta, dicereque conatus aliqua vel mandare, ut singultus ilia crebrius pulsans, stridorque dentium et brachiorum motus velut caestibus dimicantium indicabat, iam superatus, liventibusque maculis interfusus, animam diu conluctatam efflavit.

G gives dimicantium, but V has dictu cantium; whence Heraeus proposed deluc-

fects the ersae, ad et viris. stebant. . These

20. 7. 17

ositatis'.

sference

ur. The

debant, tulimus

t trucu-

nque et

praece-

itiebant

spectus; tu'; for

19. 5. 3 ctis' for

ndentes

quently

tantium. This quite spoils the force of conluctatam later, and we can bid it farewell with a clear conscience; for dictu cantium is no darker mystery than m misread as ct, and i as u. Cf. 14. 5. 8 'remor' for 'rector', 15. 2. 5 'praefectibus' for 'praesentibus', 18. 9. 2 'uberem cultu' for 'ubere et cultu', 22. 16. 14 'hactenus' for 'amoenus', 22. 16. 16 'domis' for 'doctis', a correction by Professor Paul Maas, which he has communicated to me; and 14. 6. 18 'vocabuli' for 'vocabili', 'bybliothecus' for 'bibliothecis', 20. 11. 18 'ugnes' for 'ignes', etc. 31. 8. 5. ne subita multitudo, ut amnis inmani impulsu undarum obicibus ruptis

accessum so much d beast;

emissus, convelleret levi negotio cunctos, suspecta loca acutius observantes. So Clark; a leaf of V is lost here, though the later manuscripts had taken their copies. They chiefly give ut immanis pulsis, though A and E's second hand have ut immanis pulsus. We naturally recall 15. 4. 2 'immani pulsu Rhenus', 17. 7. 11 'impulsu crebriore aguis undabundis' (probably after Gell. 2. 28. 1 'aquarum subter in terrarum cavis undantium pulsibus fluctibusque'), 28. 2. 2 'undarum pulsu inmani'. 'Non is equidem sum', Valesius engagingly notes, 'qui omnia pro arbitrio corrigere velim: sed tamen tacere non possum quin coniecturam meam hic proponam. Suspicor enim scribendum esse, uti amnis impulsu undarum.' Novák would read ut amnis inmani pulsu; Blomgren suggests ut inmani amnis pulsu. These, as Clark's ut amnis inmani impulsu, are to my mind not near enough to the manuscripts. Better would be ut amnis inmanibus or inmanibus amnis pulsibus undarum, after 22. 13. 4 'et fontes antehac aquarum copiosis pulsibus abundantes'. For the easy corruption, cf. 14. 6. 15 'calcis' for 'calcibus', 17. 2. 2 'reluctantis' for 'reluctantibus', 27. 12. 6 'passisque' for 'passibusque', 28. 6. 6 'negandis' for 'negantibus', 31. 13. 4 'corporis' for 'corporibus'; conversely, 14. 10. 9 'auspicibus' for 'auspiciis', 15. 4. 12 'dorsibus' for 'dorsis', 15. 5. 25 'praesentibus' for 'praesentis'; here pulsus conserved by A and E's second hand may well be the reading of V, who originally wrote civilus for 'civilibus' at 14. 11. 8. If Ammianus here re-employed his inmanis pulsus, he wrote it plural; yet even likelier, and closer to the ductus, I would read ut inmanis amnis pulsibus undarum, after 23. 6. 57 'itidemque Ochus et Orgomanes, iuncti convenis aquis, augent inmania Oxi fluenta'.

olapsos lenius.

d by F.

rather neliores s.' But mollius

31. 16. 9. scribant reliqua potiores, aetate et doctrinis florentes. V gives no conjunction between aetate and doctrinis; Valesius wrote doctrinisque, while Clark inserts et. I have already proposed aetate arte doctrinis, and would now add Cic. Fam. 4. 4. 4 'ars et doctrina liberalis'; also, from Ammianus himself, 25. 4. 5 'ad artes confugiens doctrinarum'. See also, however, S. Blomgren, De Sermone Ammiani Marcellini Quaestiones Variae, Uppsala, 1937, p. 8; perhaps this is the truth. E. L. B. MEURIG DAVIES.

ed it to lmone-

lovák's s avida for ut

mitior

THUCYDIDES NOTES

2. 37. 1. καὶ ὄνομα μὲν διὰ τὸ μὴ ἐς ὀλίγους ἀλλ' ἐς πλείονας οἰκεῖν δημοκρατία κέκληται· μέτεστι δὲ κατὰ μὲν τοὺς νόμους πρὸς τὰ ἴδια διάφορα πᾶσι τὸ ἴσον, κατὰ δὲ τὴν ἀξίωσιν, ώς ἔκαστος ἔν τῳ εὐδοκιμεῖ, οὐκ ἀπὸ μέρους τὸ πλέον ἐς τὰ κοινὰ ἢ ἀπ' ἀρετῆς προτιμαται, οὐδ' αδ κατὰ πενίαν, ἔχων δέ τι ἀγαθὸν δρᾶσαι τὴν πόλιν, ἀξιώματος ἀφανεία κεκώλυται. CLASSEN, followed by Steup and Marchant, takes the first two sentences to mean 'though it is called a democracy, this is not to be interpreted in a narrow sense, domination by the masses, but all, ολίγοι as well as δημος, have equal rights in private matters'. This, however, would be πᾶσι δὲ μέτεστι . . . τὸ ἴσον, in that order and without the second $\mu \dot{\epsilon} \nu$; and even so would be obscure in itself, and would be followed by a γάρ-clause: the inclusion of the ολίγοι would be illustrated by, not contrasted with, the weight given to an individual's ἀξίωσις. Moreover, equality of all before the law is of course an essential principle of democracy (as Athens understood democracy), and there can be no 'but' between the statements 'Athens is in name a democracy' and 'there is equality for all before the law'. Nor does Thucydides put one there. Analyse the sentence properly, and the main line of thought is at once clear; ovoqua μέν . . . δημοκρατία needs qualification or closer definition, a δέ-clause, and this closer definition is itself expressed by $\mu \epsilon \nu \dots \delta \epsilon$ -clauses: 'Athens is called a democracy; but, while there is equality for all in civil affairs established by law [hence the emphasis on κατὰ τοὺς νόμους], we allow full play to individual worth in public affairs'; and he adds the further point, since a ξίωσις, if not aperri, so often accompanies wealth, that 'with us no poor man is barred by his obscurity'. That is, as we might say, 'in our kind of democracy, we do not say that all men are equal, but that each should be given equal opportunity, to serve the city according to his ability, and the abler man is preferred'.

Poppo and Stahl, as we should expect, saw this in the main; but like everyone else, including our MSS.' scholiasts, they were obsessed by the idea that in every sentence in the Epitaphios Pericles is contrasting Athens with Sparta; so Stahl translated οὖκ ἀπὸ μέρους τὸ πλέον . . . $\mathring{\eta}$ ἀπ' ἀρετ $\mathring{\eta}$ ς 'non tam secundum ordinem cuius est (nach Massgabe seines Standes) quam secundum virtutem'. But 'we are called a democracy, but we do not choose our leaders from a privileged class' makes no more sense than 'we are called a democracy, but there is equality for all before the law'; and such an interpretation of ἀπὸ μέρους, and such a contrast of ἀπὸ μέρους with ἀπ' ἀρετῆς (instead of with έξ ἀπάντων: cf. 6. 39. 1, ἐγὼ δέ φημι πρῶτα μὲν δῆμον ξύμπαν ωνομάσθαι, ολιγαρχίαν δὲ μέρος), are dubious in the extreme. There can be no doubt, to my mind, that the Oxyrhynchos Commentator's interpretation is right: οὐ κατὰ τὸ μέρος τὸ ἐπιβάλλον ἴσον αὐτῷ τῆς πολιτείας πρὸς τὸ κοινὸν τιμᾶται ἀλλὰ διὰ τὴν ἀρετήν. 'A democracy might be held to mean a constitution by which everyone has an equal share in government, every man in his turn holding office [all office, not only at έγκύκλιοι ἀρχαί, which are held in turn in Athens]; but, though we have complete equality in civil affairs, ours is not of that type.' ἐν μέρει would have been clearer; but Thucydides writes ἀπὸ μέρους to make clearer the contrast with ἀπ' ἀρετῆς. For this use of ἀπό Stahl compares 1. 10. 2 and 3. 38. 4; two instances in the Epitaphios are in fact closer, 36. 4 and 41. 2. Steup objects that with this meaning προτιμάται cannot stand; but of course it can-everyone might be preferred to office in turn, and would be obeyed while in office (37. 3); and in any case $\pi \rho \sigma \tau \mu \hat{a} \tau a i$ is to be taken mainly with κατά την άξίωσιν.

¹ Aristotle, Pol. 4. 8. 4, 1294^a9, definitely calls κρατία μέν είναι μάλιστα τὸ τὰς τιμὰς νενεμῆσθαι this an aristocratic principle: δοκεῖ δὲ ἀριστοκατ' ἀρετήν.

A contrast with Sparta here is ruled out, because what we have, in the δέ-clause,

is a dem and robs
Thu

δέ, t for τ Hali esser

3. 23

βέβο

exce pref But part vδan desc and Apa (2) t Thr the

thei ent und with

logi

alm

is,

doi

the

So

5. 29 wea αἴθρ is a closer definition of democracy, of the Athenian type; and Sparta was not a democracy of any type. This contrast is not in fact made in the Epitaphios till c. 39, and is almost confined to that chapter. Certainly χρώμεθα γὰρ πολιτεία οὐ ζηλούση τοὺς τῶν πέλας νόμους is not an allusion to the story (perhaps after all unknown to Thucydides) that Sparta had borrowed her constitution from Crete, more than four hundred years before; she had enjoyed ordered government ever since (1. 18. 1).

In the last clause I do not feel that there is need to alter the MSS. reading, $\tilde{\epsilon}\chi\omega\nu$ $\delta\dot{\epsilon}$, to $\tilde{\epsilon}\chi\omega\nu$ $\gamma\dot{\epsilon}$, with Reiske, followed by Stuart Jones and others; $\kappa\alpha\tau\dot{\alpha}$ $\pi\epsilon\nu\dot{\alpha}\nu$, $\tilde{\epsilon}\chi\omega\nu$ $\delta\dot{\epsilon}$ for $\pi\dot{\epsilon}\nu\eta$ s $\mu\dot{\epsilon}\nu$ $\tilde{\omega}\nu$, $\tilde{\epsilon}\chi\omega\nu$ $\delta\dot{\epsilon}$, is in Thucydides' more artificial manner which Dionysios of Halikarnassos disliked. 6. 78. 1, $o\dot{v}$ $\pi\rho o\delta\iota\epsilon\phi\theta$ apphé $\nu o\nu$ $\dot{\epsilon}\mu o\hat{v}$, $\dot{\epsilon}\chi\omega\nu$ $\delta\dot{\epsilon}$ $\dot{\epsilon}\nu\mu\mu\alpha\chi o\nu$ $\dot{\epsilon}\mu\dot{\epsilon}$, is not essentially different.

3. 23. 5. κρύσταλλός τε γὰρ ἐπεπήγει οὐ βέβαιος ἐν αὐτἢ ὥστ' ἐπελθεῖν, ἀλλ' οἷος ἀπηλιώτου ἢ βορέου ὑδατώδης μᾶλλον, καὶ ἡ νὺξ τοιούτῳ ἀνέμῳ ὑπονειφομένη πολὺ τὸ ὕδωρ ἐν αὐτἢ ἐπεποιήκει, ὂ μόλις ὑπερέχοντες ἐπεραιώθησαν. (The night of the escape from Plataia, in midwinter.)

The scholiast's note on η βορέου is: ὁ η σύνδεσμος ἀντὶ τοῦ ήπερ κεῖται. βορέας γὰρ βέβαιον ποιεῖ κρύσταλλον, ἀπηλιώτης δὲ ύδατώδη. Scholars have generally (with the exception of Goeller) accepted his meteorology, though not his grammatical analysis, preferring since Dobree to bracket $\mathring{\eta}$ βορέου rather than believe that $\mathring{\eta} = \mu \hat{a} \lambda \lambda \delta v \mathring{\eta}$. But the meteorology is wrong. I have spent several weeks of winter in Boeotia, particularly in Thebes and Plataia, and when the wind blew strongly (νύκτα χειμέριον ύδατι καὶ ἀνέμω, 22. 1) from the north or north-east, the conditions were just as here described by Thucydides: rain and snow (occasionally hail), and, therefore, watery and unstable ice in ditches and hollows. Aristotle, Meteor. 364b6 and 21, says (1) that Aparktias (N.), Thraskias (NNW.), and Argestes (WNW.) bring fair weather; and (2) that Meses (NNE.) and Aparktias are coldest and bring most snow, and Aparktias, Thraskias, and Argestes bring hail: the former statement should refer to the summer, the latter (or at least, the first half of it) to the winter. (The author of the De Mundo, 394b28-30, says that of the north winds, the NNE.—called the Meses in the Meteorologica—was specifically called Boreas.) Theophrastos, Sign. 36, repeats this, and he is almost certainly writing of Attic weather (see 20, 22, 24, 43, 47), which in this respect is, though milder, not essentially different from Boeotian. Aristotle was probably doing the same. When Arnold says, 'the scholiasts of Constantinople, however ignorant on many points, must at least have been acquainted with the weather in their own country', he forgets that the winter climate of Constantinople is very different from that of central Greece. He asks plaintively 'if ever there was firm ice at all, under what wind could it take place, if it could be neither with an east wind, nor yet with a north?' The answer is, under none, but in still, not stormy, weather.

If it be thought that Thucydides could not or would not make observations on the weather for himself, he might have made much the same remark about Boreas and the ice by remembering Homer, Il. 15. 170-1,

ώς δ' ὅτ' αν ἐκ νεφέων πτῆται νιφας ἢὲ χάλαζα ψυχρὴ ὑπὸ ῥιπῆς αἰθρηγενέος Βορέαο. Ι

So in Odysseus' story to Eumaios, Od. 14. 475-7,

κείμεθα, νὺξ δ' ἄρ' ἐπῆλθε κακὴ Βορέαο πεσόντος, πηγυλίς· αὐτὰρ ὕπερθε χιών γένετ' ἠύτε πάχνη ψυχρή, καὶ σακέεσσι περιτρέφετο κρύσταλλος,

1 αἰθρηγένης, a conventional epithet (cf. Od. 5. 296), because the N. winds bring fine and cool weather in summer; see Theophrastos, Sign. 36, αἴθριοι δὲ μάλιστα Θρακίας καὶ . . . ἀπαρκτίας;

not presumably because storms from the north often blew up from a clear sky, like that off Magnesia from the direction of the Hellespont in Hdt. 7. 188. 2 (see below).

κέκληται ν ἀξίωσιν, ροτιμαται, εκώλυται. to mean ow sense, n private d without wed by a ted with, e the law nocracy).

mocracy'

ne there.

It; ŏνομα

nis closer

Icy; but,

emphasis

and he

lth, that

our kind

en equal

eferred'.

veryone

n every

o Stahl

m cuius

ne law';
vs with
ξύμπαν
doubt,
οὐ κατὰ
ἀρετήν.
n equal

e called

no more

only aimplete er; but for this are in

would y with

clause, εμῆσθαι the frost comes with the *falling* of the wind; and I think $\pi\epsilon\sigma\delta\nu\tau\sigma\sigma$ may have this its normal meaning in Hesiod, W.D. 547 too (where L. and S.º and editors generally say it is for $\epsilon\mu\pi\epsilon\sigma\delta\nu\tau\sigma\sigma$),

ψυχρη γάρ τ' ηὼς πέλεται Βορέαο πεσόντος, ηῶιος δ' ἐπὶ γαῖαν ἀπ' οὐρανοῦ ἀστερόεντος ἀὴρ πυροφόρος τέταται μακάρων ἐπὶ ἔργοις,

for ἀὴρ πυροφόρος (if this is the right reading) is hardly a description of a blustering north wind; and that wind is said to get up in the evening of such a day (in the month Lenaion), and to bring with it not a hard frost, but cold and wet (552-6). Virgil, Georgics, 2. 334, is similar, though in other passages he writes of hard frost accompanying Boreas. In Lucian's True History, however, the north wind brings an exception-

ally hard frost (2. 2): true history?

We should then certainly keep $\beta o \rho \acute{e} o v$ in this passage in Thucydides. It is more difficult to be sure of ἀπηλιώτου, particularly as τοιούτω ἀνέμω below should apply to either wind. In Meteor. 363b12, Apeliotes is the true east wind, and we hear nothing of its qualities; but in de Vent. Sit. 973215-25 we are told that many identified it with Kaikias (NE. or, in Meteor., ENE., blowing from the point where the sun rises at midsummer), which causes storms, especially at Cape Kaphereus, blowing from the Hellespont and often called Hellespontias. In Meteor. 364b19 and Theophr. Sign. 38, the Kaikias is said to be especially rainy, and to blow predominantly about the time of the spring equinox. This is the Apeliotes ('called Hellespontias in that district') that destroyed so many Persian ships off southern Magnesia in the summer of 480 (Hdt. 7. 188. 2). It seems probable that Thucydides means by ἀπηλιώτης the same stormy and rainy wind from ENE. It is to be noted, moreover, that, according to Herodotos, the Athenians in 480 had prayed to Boreas to help them, and built a shrine to him by the banks of the Ilissos in gratitude for the storm, from which it would appear that Boreas is here the NNE. wind (or at least includes it: cf. the passage from de Mundo cited above), and that no great distinction was drawn between the two north-easterly winds. Hence we may keep ἀπηλιώτου in Thucydides, as well as βορέου, and we shall find no difficulty in τοιούτω ἀνέμω in the next sentence.

 3. 44. 2. ἤν τε γὰρ ἀποφήνω πάνυ ἀδικοῦντας αὐτούς, οὐ διὰ τοῦτο καὶ ἀποκτεῖναι κελεύσω, εἰ μὴ ξυμφέρον, ἤν τε καὶ ἔχοντές τι ξυγγνώμης, εἶεν, εἰ τῆ πόλει μὴ ἀγαθὸν φαίνοιτο.

έχοντές] έχοντάς Lindau, edd. είεν] έῶν Lindau (Stahl, Hude); ἀφεῖναι Badham; ἐλεεῖν Fittbogen; fortasse ἐῶν οἰκεῖν Stuart Jones. είναι ἐν τῷ πόλει, εἰ μὴ ἀ. φ. Spratt.

Classen, though with no great confidence, defended the MSS. reading elev (at the same time adopting Lindau's exorrás), comparing Ar. Plut. 458-71 and Thuc. 3. 3. 3, where there is aposiopesis in place of $\epsilon l \epsilon \nu$ in a pair of alternatives, but with the first of them. 'Nur konnte an unserer Stelle die Konsequenz der ersten Alternative, auf welche es dem Redner vor allem ankam, nicht verschwiegen bleiben, während es seinem Gefühl entspricht, über die schmerzliche Folge der zweiten möglichst leise hinwegzugehen; und dazu ist das είεν (vgl. Soph. Ai. 101, El. 534) sehr geeignet, nicht als eigentlicher Nachsatz, sondern als resignierter Ausruf: "nun gut! so verlange ich keine Gnade, wenn es dem Staate nicht frommt!"' To this there is a variety of objections: (i) in sentences of this kind, $\epsilon l \epsilon \nu$ or aposiopesis (or the analogous $\tau a \hat{\nu} \tau a$ αριστα, Thuc. 1. 82. 2) must go with the first alternative. (2) Diodotos does not, and cannot, mean 'if I prove them to be deserving of some pardon, so be it, let them be executed', but 'I shall not necessarily urge that they be not executed either'. Nor is his tone at all 'resigned' at the painful consequence of proving them not altogether guilty; on the contrary, he is vigorously asserting that he can be as ruthless as Kleon and is much more realistic (οὐκ ἀξιῶ ὑμᾶς τῷ εὐπρεπεῖ τοῦ ἐκείνου λόγου τὸ χρήσιμον

being the fations stood to sauncon ich ke

tive i

other
be or
Sprat
using
and /
this
rouro
prefe
repea

stran ξύγγη thou one, some μη d becocorreunco

3. 44

θ

thou

id at tion Mare loxu, obscuthe and asse

1 ἄνδρι 2

so a

I to

opp

e this its erally say

lustering e month . Virgil, ompanyception-

is more apply to nothing l it with rises at rom the ign. 38, he time istrict') of 480 e same ding to built a hich it passage en the well as

λεύσω, огто. bogen;

at the 3. 3. 3, e first ative, hrend lichst ignet, lange ety of ταῦτα , and m be Vor is

ether Cleon σιμον

τοῦ ἐμοῦ ἀπώσασθαι); that it is Kleon, who imagines himself the hard realist, who is being sentimental (δικαιότερος γὰρ ὢν ὁ λόγος πρὸς τὴν νῦν ὑμετέραν ὀργήν) and ignoring the facts (οὐ δικαζόμεθα πρὸς αὐτούς κτλ.). (3) Classen objected to the various emendations of εἶεν (ἐᾶν, ἐλεεῖν, etc.) that they required the negative οὐ κελεύσω to be understood from the first alternative; but the same applies, in essentials, to $\epsilon l \epsilon \nu$ —that is to say, you cannot write 'so be it, if it is not advantageous to the city'; as Classen unconsciously bore witness when in his translation he added the words, 'so verlange ich keine Gnade', where the desired negative is to be found.

But his objection that a negative must be repeated before ¿au or any other infinitive is sound. The Greek for 'not ..., not ... either' is οὖκ ... οὖδέ, and however many other words may be left to be understood in the second clause, the negative cannot be one of them—we must read οὐδ' ἐᾶν, or οὐδ' εἶναι ἐν τῆ πόλει (or οὐδ' ἐᾶν εἶναι). Ι Spratt's ingenious conjecture is supported by 39. 6; for Diodotos often retorts by using Kleon's own words, as in this passage τῷ εὐπρεπεῖ τοῦ ἐκείνου λόγου (cf. 38. 2) and βουλευόμεθα περί αὐτῶν (cf. 38. 7). The only scholar, as far as I know, who saw this quite clearly was Bergk, who conjectured ήν τε καὶ ἔχοντάς τι (ξυγγνώμης, οὐ διὰ τοῦτο καὶ ἄξιοι ἄν) ξυγγώμης εἶεν.2 This is very probably on the right lines (I should prefer simply οὐδ' ἄξιοι ἄν ξ. εἶεν), for it explains εἶεν. But I do not see Thucydides repeating ξυγγνώμης in this way.

There are two further difficulties which may lead to a more probable correction, though I cannot give one: ἔχειν τι ξυγγνώμης in a passive sense, like ἔχειν αἰτίαν, is strange when ἔχειν ξυγγνώμην is regularly active and has been so used in 39. 2, though ξύγγνωμον is passive in 40. 1 and 4. 98. 6. Secondly, all the MSS. have έχοντες, and though Lindau's correction, which has been accepted by all editors, is not a difficult one, the participle in the nominative suggests (since we must make some correction) something like ήν τε καὶ ἔχοντές τι ξυγγνώμης (φαίνωνται), οὐδ' είναι ἐν τῆ πόλει, εἰ μὴ ἀγαθόν [φαίνοιτο]. But I have no great confidence in this; for if φαίνωνται had become misplaced, it is unlikely that we should find in our MSS. a unanimous correction to φαίνοιτο, especially since a consequently ungrammatical έχοντες was left uncorrected.

3. 44. 3. νομίζω δὲ περὶ τοῦ μέλλοντος ἡμᾶς μᾶλλον βουλεύεσθαι ἢ τοῦ παρόντος. καὶ τοῦτο ο μάλιστα Κλέων ἰσχυρίζεται, ές τὸ λοιπὸν ξυμφέρον ἔσεσθαι πρὸς τὸ ήσσον ἀφίστασθαι θάνατον ζημίαν προθεῖσι, καὶ αὐτὸς περὶ τοῦ ἐς τὸ μέλλον καλῶς ἔχοντος ἀντισχυριζόμενος τάναντία γιγνώσκω.

ô ABEFM: & CG

Stahl kept the reading of the majority of MSS., and interpreted τοῦτο ὄ, 'quod ad id attinet quod'; to which Classen objected, rightly in my view, that such a construction is without parallel in Thucydides. He read τούτου, depending on τάναντία below; Marchant suggests that CG's reading may be right, τοῦτο ἀντισχυριζόμενος ῷ Κλ. λοχυρίζεται. Both these interpretations are forced, and leave a scarcely tolerable obscurity; and both ignore the order of the words in the parallel dependent clauses: the emphatic words are ές τὸ λοιπὸν ξυμφέρον ἔσεσθαι (not θάνατον ζημίαν προθεῖσι) and the repeated, with characteristic variatio, περί τοῦ ἐς τὸ μέλλον καλῶς ἔχοντος; and I believe that, bearing this in mind, we may keep τοῦτο ὁ and interpret, 'and this assertion in particular which Kleon makes, that we must have our eyes on the future, so as to reduce the number of revolts by, he argues, imposing the death penalty, I too make in my turn, that we must think of future advantage, but I come to the opposite conclusion'; that is, practically, 'I make the same assertion that Kleon

passage, which gives Rhein. Mus. 1870, p. 320; ² I cannot find the reference to Bergk's conthis, however, appears to be wrong.

¹ εαν is not necessary: cf. 3. 75. 1, δέκα μεν jecture. I quote it from Widmann's note on this ἄνδρας τοὺς αἰτιωτάτους κρίναι, τοὺς δὲ ἄλλους οἰκεῖν.

emphasized so much, only my conclusion is the opposite'. τοῦτο is both the antecedent to ő and the object of ἀντισχυριζόμενος; and refers to the argument of the previous sentence.

 82. 7. βᾶον δ' οἱ πολλοὶ κακοῦργοι ὅντες δεξιοὶ κέκληνται ἢ ἀμαθεῖς ἀγαθοί, καὶ τῷ μὲν αἰσχύνονται, ἐπὶ δὲ τῶ ἀγάλλονται.

Editors have disputed whether ἀμαθεῖς or ἀγαθοί is predicate to κέκληνται ('when stupid are called good', or 'when good are called stupid'); clearly ἀγαθοί is the proper contrast to κακοῦργοι, and ἀμαθεῖς to δεξιοί; and we have a characteristic variatio in the chiasmic order. Others (Krüger and Steup) take both κακοῦργοι and δεξιοί, and therefore both ἀμαθεῖς and ἀγαθοί, as predicate: 'die meisten lassen sich lieber gewandte Schelme als ungebildete Biedermänner nennen.' This, as Steup saw, requires that we bracket ortes, and, as he did not see, that we read κακούργοι (καί) δεξιοί . . . η ἀμαθεῖς (καί) ἀγαθοί; and we must in consequence reject it. The real difficulty of the sentence, however, lies in the use of the word $d\mu a\theta \epsilon \hat{\imath}_{s}$. It is implied that, in normal conditions, it would be more usual, and morally that it would be more desirable, for men when ayaboi to be called auabeis (or when auabeis to be called ἀγαθοί) than when κακοῦργοι to be called δεξιοί; but in what circumstances could it possibly be desirable to call good men stupid or usual to call stupid men good? Editors have silently assumed that $\partial_{\mu}a\theta\epsilon\hat{i}s$ here is equivalent to $\epsilon\partial_{\eta}\theta\epsilon\hat{i}s$; but of course it cannot be—it is always a highly uncomplimentary term, even though the political advantages of ἀμαθία may be praised by Archidamos, Kleon, and Bagehot (a pretty trio: see my note on 1. 84. 3). Krüger's interpretation partly avoids this difficulty; and I believe that it can be altogether avoided by a much easier emendation. I think that \(\delta \) here means 'or', not 'than', and that \(\delta \) aov, like so many comparatives in Thucydides and others, means 'more readily than not', or 'more readily in these than in other and better conditions'. To avoid an intolerable obscurity, especially in this context after ηδιον η in the previous sentence, we should insert η before κακοῦργοι—an easy enough change after $\pi \circ \lambda \lambda \circ i$ when oi and η were pronounced the same. 'More often than not in these conditions either the unprincipled are called clever or the honest stupid, and most men are ashamed of the latter and glory in the former.'

A. W. GOMME.

UNIVERSITY OF GLASGOW.

In and three evice that continue but poss

In a con of t the of c the fron The with rou play clea ven in t of t had cen

> and in Séch

> > (Ler

vas from Sar

than F.R of the actor Sher 6

ecedent to sentence.

καὶ τῶ μὲν

rai ('when the proper ic variatio ind δεξιοί. sich lieber eup saw, θργοι (καί) The real is implied d be more be called s could it en good? of course political (a pretty lifficulty; . I think atives in

ipyoi—an e. 'More er or the mer.'

nese than

ly in this

OMME.

SOUTH ITALIAN VASES AND ATTIC DRAMA

In The Theatre of Dionysus in Athens Dr. Pickard-Cambridge includes a most useful and convenient collection of south Italian vase-paintings which have been held to throw light on the stage-settings of Greek tragedy. He concludes that they give no evidence for Athens in the fifth century and in particular do not justify the assumption that interior scenes were played in a porch in front of the central door. The second conclusion is true, but some of the vases do show that the central doors could be thrown wide open to display an interior scene. The first conclusion is formally correct, but it should be remembered that the plays came from Athens, and it is at least possible that the south Italian producers modelled themselves on Athenian producers. In any case these vases are worthy of further consideration.

A group of vases with polychrome decoration on black ground has a special connexion with the theatre, since, in addition to the kalyx-krater with the prologue of the Eumenides and the fragment with the meeting of Jason and Pelias, it includes the fragment with the tragic actor holding his mask³ and various vases with pictures of comic actors.4 These vases were made in Tarentum in the years round the middle of the fourth century. The Eumenides vase⁵ shows the priestess starting back in horror from the temple where Orestes clasps the omphalos surrounded by sleeping Furies. The painter has combined the moment when the priestess comes out of the temple with the moment when the central door is open and the audience see Orestes surrounded by the Furies. Dr. Pickard-Cambridge says: 'There is no attempt to reproduce the scene in the Eumenides exactly; the Furies are not sleeping on chairs, as in the play, but lying on the ground, partly inside and partly outside the aedicula, which is clearly not a porch, but a conventional indication of a temple.' Where did the convention come from except from the theatre? The other points are unimportant: in the Tarentum production some, at least, of the Furies may have lain on the steps of the omphalos and they have been represented partly outside because the painter had not room for them all inside. For the Eumenides as produced in Tarentum, the central door must have been marked by wooden pediment and columns as on this vase.6 Pediment and columns as a symbol of the central door in a theatrical palace front recur on two early fourth-century vases, the Ruvo Lycurgus7 and the New York Sarpedon, and on the Dresden Tereus, which is Paestan of about 325 B.C. It seems therefore fair to suggest that the central door was often marked by a pediment and

A seemingly different picture is given by the fragment with the meeting of Jason and Pelias.¹⁰ Jason and Pelias meet in front of a shallow colonnade, which connects

² PC, figs. 55-6. ³ B, fig. 216.

4 E.g. B, figs. 376, 395.

⁵ Watzinger, F.R. iii. 368, dates this later than the Orestes krater in Naples (S, fig. 31, F.R., pl. 179) which he puts in the second quarter of the fourth century. He dates the Würzburg actor after 350. Bulle accepts this dating, Skenographie, 5, n. 6.

⁶ A very similar representation of the temple of Athena at Troy occurs on an early Lucanian pelike in Naples (PC, fig. 12; S, fig. 48; Watzinger, in F.R. iii. 341, dates apparently in 375-350 B.C.), which probably recalls Sophocles' Lakainai. Compare also the temple of the Tauric Artemis on a kalyx krater in Moscow (PC, fig. 16; S, fig. 114). For both, Dr. Pickard-Cambridge uses the adjective 'conventional' where I should say 'derived from the theatre'.

⁷ Lucanian, PC, fig. 9; S, fig. 19 (again according to Dr. Pickard-Cambridge 'conventional').

⁸ Early Apulian, Sarpedon painter, PC, fig. 30; B, fig. 200; Trendall, Frühitaliotische Vasen, 27.

^{27.}
⁹ B, fig. 58; S, fig. 20; Trendall, *Paestan Pottery*, 91, fig. 53.

¹⁰ See n. 2 above.

¹ I quote, where possible, reference to pictures in Pickard-Cambridge, Theatre of Dionysus; Séchan, Études sur la tragédie grecque; Bieber, History of the Greek Theater. The Eumenides vase (Leningrad) is figured PC, fig. 11; S, fig. 30.

two projecting paraskenia or porches: in each of the doors at the back of the two porches a daughter of Pelias listens. Bulle has reconstructed the theatre as having no central door in the colonnade connecting the two porches. A palace with no central door is unthinkable, even if it be granted that the daughters listened from side-doors belonging to different parts of the women's quarters, which seems to me complicated and unnecessary. The painter has left out the central door because it would have provided a bad background for Jason and Pelias, and he has put the two daughters at opposite ends because, as Bulle saw, he thinks of them as a contrasted pair like Antigone and Ismene. The painter of a Campanian vase, dating from rather after the middle of the century, has done the same. The centre is occupied by Orestes and Pylades, who have come as in Euripides' Iphigenia in Tauris (67 f.) to spy out the temple; to make the allusion to the Iphigenia in Tauris clear, the painter has put the Tauric Artemis in front of the left paraskenion and Iphigenia in front of the right paraskenion, thereby bamboozling modern commentators.2 The set has two differences from the Jason set; the paraskenia doors are at the front instead of at the back and instead of a colonnade between the paraskenia we see only a roof, which looks like a sounding-board. Again, it seems to be entirely justifiable to assume that the temple had a central door, which can be imagined as like that of the Eumenides temple. An idea of the complete set can be got by combining the central door from the Eumenides vase with the paraskenia and colonnades from the Jason and Iphigenia

The colonnade between the paraskenia and the central door were for some painters a shorthand symbol meaning 'picture inspired by a tragedy', because this was a convenient part of the background against which action took place on the stage, but its use does not mean that the scene depicted was a scene acted against this background. The instances known to me are (a)3 Apollo driving the Furies out of the Delphic temple; here Orestes at the omphalos and the fleeing priestess are in the foreground, the columns in the background, and the tongues of the shoulder ornament represent the roof; (b)* death of Meleager: columns in foreground and background connected by a roof; Althaea rushes in horror-struck; (c) Myrtilus, Oenomaus, and Hippodamea; the columns are in the foreground only and support a roof, the back wall is three-quarter height and shows the horses of Oenomaus; (d)6 Madness of Herakles. Here the columns are in the foreground; the back wall is windowed for the top third of its height and joined to the front columns by a roof (the column below the parapet is engaged). Megara rushes through a door on the right; this door has its own porch.7 Only (c), and of (c) only the conference of Myrtilus and Oenomaus, is likely to be an actual scene acted on the stage; (a) is a conflation of various moments in the prologue of the Eumenides; (b) and (d) are more likely to derive from messenger speeches. The colonnade is the symbol which shows that the artist was thinking of drama and must therefore itself come from the theatre; (c) and (d) give us, in addition,

the 1

shall

quar

Phth

the 1

Apul

hand

ident

Whe

save

Niob

like

wher

of th

a fur

The

and t

archi like t

case

by tr

of th

the b

Eury

(d) al

Creon

Thers

parti

door

so-ca

south

Gnat

I P

vening

contai

akrotes

² E.

4 P

5 P

think,

entabl

bridge

surely

the cu

inside

outside

bridge

ture, Tappear

7 P(

6 P

T

¹ PC, fig. 58; B, fig. 175; Beazley, JHS, lxiii. 82; Trendall, Paestan Pottery, 111.

² On an Apulian volute krater of the second quarter of the century (PC, fig. 19; S, fig. 111; B, fig. 69; F.R. iii. 349, pl. 148) Orestes is sitting on the altar with the temple in the far background; Iphigenia comes forward as if to greet him. Here again the inspiration is the prologue of Euripides' I.T.; Iphigenia has to be in the foreground of the picture because it is her play and, having put her there, the painter made her see Orestes. He has proceeded with similar freedom in treating the Neoptolemus story

⁽PC, fig. 18; S, fig. 75). These two vases tell us nothing about the theatre and should not be included in the discussion.

³ S, fig. 31; F.R. iii, pl. 179. Apulian volute krater; 375-350 B.C.

⁴ PC, fig. 22; S, fig. 123; F.R. iii, 200 n. 124. Apulian volute krater, rather later than (a).

⁵ PC, fig. 23; S, fig. 126; F.R., loc. cit., cf. Beazley, EVP, 52. Apulian situla; same date as (a).

⁶ PC, figs. 83-4; B, fig. 351; S, fig. 155. Paestan kalyx-krater; soon after 350 B.C. Trendall, Paestan Pottery, 31 f.

7 See below, p. 17.

the possibility of windows in the back wall. To these, and to the porch in (d), we shall return later.

The Meleager vase marks the transition to the large Apulian vases of the last quarter of the century because the colonnade occupies only part of the picture; Phthonos, Oeneus, Theseus, and Peleus are grouped freely in the field below and to the right of it. From here it is not far to the typical central aedicula, which the late Apulian vase-painters use as a focus of the composition. The aedicula also is a shorthand symbol which can be used in various ways. The simpler forms of aedicula are identical with the shrines erected to the heroized dead, as represented on vases.2 When, therefore, Herakles (Euripides or Astydamas) appears as a divine deliverer to save Antigone from Creon, he is painted as a hero in his shrine,3 and when Aeschylus' Niobe mourns the loss of her children, she also appears in a shrine set on a high stage like the funeral shrine on an Apulian amphora in Madrid.4 The scenes in Hades, where the characters sometimes wear tragic costume, show the reverse process; one of these is particularly striking,5 because it shows not only a central aedicula but a further door on the left which may be a reminiscence of the door in the paraskenion. The obvious explanation is twofold: first, there were tragedies with settings in Hades and these influenced the painters whenever they painted a Hades scene; secondly, the architecture of the central door in the normal temple/palace set of tragedy was very like the architecture of the funeral shrine and, therefore, the painter could, as in the case of Niobe, allude to the funeral shrine when he was painting a picture inspired by tragedy. In the pictures inspired by tragedy, the aedicula may be the central door of the Tauric temple from which Iphigenia issues with her letter,6 or (like (c) above) the background for an actual stage scene, Amphiaraus interrupting Hypsipyle and Eurydice in Euripides' Hypsipyle;7 it may, however (like the colonnade in (b) and (d) above), be the background for a scene reported in a messenger speech, the death of Creon's daughter in the Medea,8 or Phoenix and Achilles in Chairemon's Achilles Thersitoktonos.9 These big vases give a kind of résumé of themes connected with a particular tragedy. They tell us nothing about its staging, except that the central door was adorned with pediment and columns.

The porch and gallery in the Madness of Herakles¹⁰ give us a cross-reference to the so-called 'Phlyakes' vases.11 The name is conventional: the vases were made in early south Italian fabrics, as well as Lucanian, Paestan, Campanian, Apulian, and Gnathia; they date from the beginning (and possibly a little before the beginning)

1 Perhaps PC, fig. 14; S. fig. 112, is an intervening stage, as there a section of the colonnade containing the central door is cut short and given akroteria and pediments.

² E.g. PC, figs. 25, 32.

of the two as having

no central

side-doors

mplicated

ould have

daughters

l pair like

r after the

restes and

y out the

as put the

the right

wo differ-

the back

looks like

he temple

s temple.

from the

Iphigenia

for some

ause this

he stage,

inst this

out of the

the fore-

rnament

ekground

aus, and

the back

dness of

owed for

nn below

or has its

maus, is

noments

essenger

nking of

ddition,

ses tell us

d not be

an volute

oo n. 124.

. cit., cf.

ame date

Paestan

Trendall,

p. 17.

an (a).

3 PC, fig. 13; B, fig. 70; S, fig. 85.

4 PC, fig. 10; S, fig. 24; PC, fig. 32, cf. fig. 25.

⁵ PC, fig. 29; S, fig. 161. This must also, I think, be the explanation of the column and

entablature top left in PC, fig. 24.

6 PC, fig. 15; S, fig. 113. Dr. Pickard-Cambridge says 'a temple and not a porch', but surely it is the porch of a temple through which the cult image can be seen; the altar is also inside because the painter had no room for it outside.

7 PC, fig. 20; S, fig. 103. See Pickard-Cambridge in Powell, New Chapters in Greek Literature, Third Series, 125 f. 'Amphiaraus, who had appeared at the very moment of her need, bids

Eurydice stay her hand.' This is the scene represented and should qualify Dr. Pickard-Cambridge's statement on p. 92: 'Clearly the painting does not depict any one scene as performed on the stage, but gives reminiscences of several parts of the story.

⁸ PC, fig. 21; B, figs. 72-5; S, pl. VIII. See

D. L. Page, Euripides' Medea, lx. 9 PC, fig. 17; S, fig. 156. Again Dr. Pickard-Cambridge says that 'the aedicula represents a

building in the manner conventional in these vase-paintings', but where was the convention in this case derived from except from theatre sets?

10 See above, p. 16, n. 6.

11 Heydemann listed these in Jb. 1886, 260 f., giving them capital and small letters. Zahn added to the list in F.R. iii. 180, giving his additions small letters. I quote these as Heydemann M, n, Zahn q, etc.

of the fourth century. The gallery in the Madness of Herakles becomes a window on several of the Phlyakes vases, notably in the Paestan painting of a comic actor dressed as Zeus climbing to Alkmene's window. The porch requires a little further discussion, In the Madness of Herakles we see only the cross-strut and the beam it carries, which projects almost as far as the front doorstep, and the natural explanation is that the painter has represented the strut in profile instead of full face so as to make its nature clear; it supported a porch which stuck out beyond the front columns of the colonnade. Exactly the same arrangement seems to be shown on one of the Phlyakes vases,2 except that there a sloping roof with a palmette akroterion (like that on the paraskenia in the Jason and Pelias) is shown; and on two other vases a background with a colonnade is represented.3 The same porch with sloping roof, but without a colonnade, can be seen on one of the earliest Phlyakes vases,4 which shows the arrival of Cheiron at a healing spring, with two nymphs surveying him through a chink in the rocks (perhaps the window in other sets). In an amusing set of the temple of Apollo at Delphi⁵ the porch has a flat roof and there is no colonnade. In one scene6 the porch has an elaborate pediment, which is more like those already discussed in connexion with tragedy. In other scenes7 the door has a simple wooden framework. Sometimes8 no background is represented at all.

In most of these scenes the stage is represented: it is supported either on plain wooden posts⁹ or on Ionic or Doric¹⁰ columns;¹¹ curtains¹² are sometimes hung across the columns to give an appearance of solidity below the stage. The stage is often approached by a short flight of steps.¹³ We have no evidence for the existence of this lowish stage in the tragic scenes; the only picture which would certainly have given it, if it existed, is the Jason-Pelias picture, and that is broken above the level where the stage would have been shown. It is, however, possible that the stage was specially built for the comic representations. The elaborate doors and colonnades in some of these examples (and in particular the cross-references to the Madness of Herakles) suggest that the sets or parts of the sets of tragedy were sometimes used as the background even for comic scenes. The use of a similar stage in Attica is proved by an oenochoe of the late fifth century, ¹⁴ in which a comic figure equipped as Perseus with kibisis and harpe leaps on to a stage with a flight of steps leading up to it. Two

¹ (1) B, fig. 368 = Heydemann I; Trendall, Paestan Pottery, 39. (2) B, fig. 387 = Heydemann, b; Trendall, loc. cit. (3) CVA, British Museum, 84/8 = Heydemann f. (4) B, fig. 365 = Zahn o.

² B, fig. 385 = Zahn l; cf. (with flat roof) B, fig. 388 = Heydemann d.

 3 B, fig. 358 = Heydemann M; B, fig. 360 = Zahn e.

⁴ B, fig. 362 = Heydemann X.

⁵ B, fig. 355 = Heydemann q; Trendall, loc. cit. 37, cf. Heydemann, K = Annali, 1853, AB.

⁶ B, fig. 381; Trendall, Frühitaliotische Vasen, pl. 28 b (Tarporley painter).

⁷ B, fig. 374 = Heydemann D; fig. 373 = Heydemann P; fig. 356 = Heydemann R; fig. 365 = Zahn o.

⁸ E.g. Heydemann A = B, fig. 389; Heydemann H = Annali, 1871, I; Heydemann k = B, fig. 384; Heydemann i = JHS, vii, pl. 62, 1; Heydemann r = B, fig. 383; Zahn, p = B, fig. 393. Also the only Athenian example (late fifth century), see below, n. 14.

 9 E.g. all quoted in last note, with the exception of Heydemann i, where the supports cannot be seen. 10 Zahn n= B, fig. 369.

¹¹ Heydemann D = B, fig. 374; Heydemann P = B, fig. 373; Heydemann g = B, fig. 391; Zahn l = B, fig. 385.

12 Heydemann X = B, fig. 362; Zahn l = B, fig. 385; Zahn q = B, fig. 392; Zahn n = B, fig. 369; Zahn r = B, fig. 371; Zahn o = B, fig. 365; Zahn s = B, fig. 378; this I think is also the explanation of the curtain on the Athenian vase mentioned below.

¹³ Heydemann M = B, fig. 358; Heydemann X = B, fig. 362; Heydemann a = B, fig. 370; Zahn e = B, fig. 360; Zahn l = B, fig. 385; Zahn q = B, fig. 392; Zahn r = B, fig. 371.

14 Bulle, Theater zu Sparta, pl. v; JHS, lxv, pl. 5; PC, 74 (the vase is, however, undoubtedly Attic). Professor Beazley explains as a dancing dwarf (cf. JHS, lix, 11, no. 30). Brommer, Satyrspiele, 70, compares for stage Tillyard, Hope Vases, no. 136 and regards as rehearsal for satyr-play, but the Perseus is not a satyr.

perf tion to e T betv to e It p is to cent how first natu writ has i earli far i matt scaro half from at le

that

aban

none

330,

there

figu

the fe T and t come vant, as rej in co vases On th on a last u by A cit.) a the cl from Come

of Hey or acto watche young X = B rather Barcelo poet is

1 Th

figures, perhaps the poet wrapped in a cloak and the choregos with a stick, watch the performance. The stage is partly covered by a curtain, which may be an amplification of the curtain below the stage, though its shape and form are extremely difficult to explain.

vindow on

or dressed

discussion.

ries, which

s that the

its nature

colonnade.

es,2 except

enia in the

colonnade

de, can be

eiron at a

s (perhaps

Delphi⁵ the

an elabor-

h tragedy.

ackground

r on plain

ung across

ge is often

nce of this

nave given

where the

s specially

in some of

Herakles)

the back-

ved by an

rseus with

o it. Two

the excep-

ports cannot

Heydemann

B, fig. 391;

Zahn l = B,

 $\begin{array}{ll} ahn & n = B, \\ ahn & o = B, \end{array}$

s I think is

ain on the

Heydemann B, fig. 370;

B, fig. 385;

; JHS, lxv,

undoubtedly

as a dancing

Brommer,

ge Tillyard,

rehearsal for

a satyr.

fig. 371.

B, fig. 369.

The Attic vase does, therefore, raise the question whether there is a real connexion between Attic comedy and the Phlyakes vases, or whether any connexion that seems to exist is to be explained away by the assumption of a common Dorian ancestry. It probably is not yet possible to give a final answer, and the most that we can hope is to suggest that if we want to know what Attic comedy in the first half of the fourth century looked like, the Phlyakes vases probably give us some idea. We must, however, be clear at the outset what we are comparing with what. Heydemann, who first collected the Phlyakes vases, dated them in the third century and therefore naturally connected them with the Hilaro-tragoedia of Rhinthon, who can hardly have written before 300 B.C., as he was born in the time of Ptolemy I (Suidas). This equation has influenced many later writers, including Dr. Bieber, who says (H.T. 259): 'The earliest of these vases date from the middle of the fourth century, and they continue far into the third century. Some of the pictures on these vases agree in subjectmatter with the titles attested for Rhinthon.' But the latest of the Phlyakes vases scarcely belongs to the third century2 and the majority of them belong to the first half of the fourth century. On the literary side, we apparently know nothing relevant from Magna Graecia between Deinolochos, son of Epicharmus, and Rhinthon. It is at least possible that the gap was filled by scenes imported from Attic comedy and that local production of parodies of tragedy started again when Attic comedy had abandoned parodies of tragedy; only two of Philemon's titles, four of Diphilus', and none of Menander's suggest parody of tragedy (Philemon's first production was before 330, Diphilus' probably about 330, and Menander's in 321), and it seems probable, therefore, that this kind of comedy was abandoned in Athens well before the end of the fourth century.

The main bulk of the Phlyakes vases belong to the period of the Middle Comedy and therefore Körte's argument, which Dr. Pickard-Cambridge reiterates,³ that the comedy of Aristophanes is far too topical for transplantation to south Italy is irrelevant, even if it is fair (which is doubtful) to take the political comedy of Aristophanes as representative of the Old Comedy as a whole. There would, however, be no point in comparing the Middle Comedy with the padded and phallic figures on Phlyakes vases if we knew that the old comic costume had been abandoned in its early years. On this, the authorities speak with no certain voice: Körte in 1893,⁴ basing his view on a study of the datable terra-cottas of comic actors, allowed the old costume to last until the middle of the fourth century; in 1921⁵ he said it had been long abandoned by Aristotle's time (presumably he means 337 B.C.?); Dr. Pickard-Cambridge (loc. cit.) apparently dates the change to the very early fourth century. As far as I know, the change of costume is first represented on monuments depicting scenes or figures from the New Comedy and the evidence that fixes them as figures from the New Comedy is that some of them wear the three masks (old man, young man, and

Our watchers also look to me as if they had some official character.

¹ The bearded and beardless figures on the back of Heydemann R = AZ, 1849, pl. 3, may be poet or actor and choregos; 'tragoidos' (actor or poet?) watches the comedy on B, fig. 381; the cloaked young man on the Cheiron vase (Heydemann X = B, fig. 362) may also be poet or producer rather than Achilles. The choregos on a vase in Barcelona (Curtius Corolla, pl. 56) is young; the poet is young on the Pronomos vase (B, fig. 20).

² Heydemann E and s (B, fig. 379) belong to the last fifteen years of the fourth century (Trendall, *Paestan Pottery*, 92) and are perhaps the latest of the Phlyakes.

³ Körte, Jb, viii, 1893, 62; Pickard-Cambridge, Dithyramb, etc., 268. Op. cit. 71.

⁵ RE, xi. 1261 (Komödie).

pseudokore), which occur on the Menander relief in the Lateran. As the terra-cottas suggest that the old costume lasted until the middle of the fourth century, it is reasonable to accept the hint provided by the Lateran relief and associate the change with Menander and the New Comedy. The change may have come in gradually, but it must finally have been universalized by a formal change of regulation, and it seems to me at least possible that this final stage was connected with the moral legislation of Demetrius of Phalerum in 317 B.C. Even then it was not apparently complete, since the Greek original of Sceparnio in the Rudens (429) certainly wore the phallus. On the Phlyakes vases padding is normally shown and in the vast majority of cases the phallus. On two vases, however, which can, with reasonable certainty, be dated in the last quarter of the fourth century, old men are seen without the phallus. It seems, therefore, likely that the comic actors in south Italy followed the Athenian lead. At any rate, costume provides no reason for doubting the connexion between Middle Comedy and the Phlyakes vases.

Further archaeological evidence for the connexion between Attic comedy and the Phlyakes vases can be found in two Athenian vases and a number of terra-cottas. An Attic aryballos* of the early fourth century shows actors in the comic costume with phallus and padding exactly as it appears on the Phlyakes vases. An Attic oenochoe⁵ of the late fifth century with a comic apotheosis of Herakles may also be quoted: the Herakles with staring eyes and turn-up nose recalls several Herakleis on Phlyakes vases as well as several Attic terra-cottas; Nike is snub-nosed and her hair is tied up in a handkerchief like several women on the Phlyakes vases, and the chariot team is preceded by a cross-eyed, snub-nosed dancer, wearing the proper phlyakes tights. Similarly, there are obvious cross-connexions between the Phlyakes vases and the terra-cottas of comic actors, many of which are shown by their provenience to be Attic. These are not easy to date because few have been found in dated contexts and style is little help when dealing with grotesques; some go back to the fifth century, but the majority belong to the first half of the fourth.6 The Attic terra-cottas are sometimes repeated by south Italian or Sicilian terra-cottas, which in itself is evidence for Magna Graecia's interest in Attic comedy.7 The hideous old woman of a pair in Würzburg wears a mask with turned-up nose and nearly bald skull, which recurs on two Phlyakes vases.8 A terra-cotta in Munich, usually called a wandering pedlar (and probably the pilos distinguishes him from a slave), with a heavy basket hanging in front to balance the long bundle on his back, is extremely like the luggage-carrying slaves on several Phlyakes vases;9 a later terra-cotta porter belongs to the New Comedy because the phallus is no longer visible. 10

¹ B, fig. 223, cf. 225. On New Comedy masks, see now Simon, *Comicae tabellae*.

² Cf. Skutsch in *Rh. Mus.* 1900, 82, n. 2 (I am indebted to Dr. Otto Skutsch for the reference).

³ Heydemann F = Bulle, Festschrift für Loeb, 32, fig. 20 (shape later than anything from Olynthus and not unlike Kertch of 330/320 B.C.); Heydemann V = B, fig. 394 (shape with transitional Paestan, e.g. Trendall, no. 241). I am not certain about the date of Heydemann c = B, fig. 402. The picture of Zahn q = B, fig. 392, does not show whether the old man wears the phallus or not.

4 B, fig. 121. Cf. AJA, 1946, 132.

⁵ Pfuhl, MuZ, fig. 572; Beazley, ARV, 848/22 Nikias painter. For snub-nosed Herakles cf. Heydemann M = B, fig. 358, O = B, fig. 357 and terra-cottas, B, figs. 111, 124. For Nike cf. Heydemann D = B, fig. 374, U = fig. 390, the right-hand nymph on X = B, fig. 362; for the dancing phlyax cf. Heydemann B = B, fig. 400.

just

the

desc

peri

go o

each

mai

be in

one

and

which

man

Hera

This

arriv

later

a sla

com

Eub

Phil

Eub

are

nak

in D

is as

pres

acce

than

Eub

Hera

at a

a rer

the '

date

Hera

his f

elder

trick

but :

1 I

2 F

Odys

vase,

pl. 75

136,

grave

400 B.

found

dates

3 F

4 F

⁶ Körte, Jb, 1893, 70, notes that pieces found in south Russia are dated by the vases with which they are found. The New York sets (B, figs. 122-35) from a grave in Athens look as advanced as any, but cannot be later than 348 B.C. because four replicas were found in Olynthus (iv. 364, 404; vii. 297, 308).

⁷ E.g. Bieber, *Denkmäler*, nos. 73, 80, 82 (with B, figs. 99 and 127), 89, 98.

⁸ Terra-cotta, B, fig. 103; vases, Heydemann M = B, fig. 358; B, fig. 381.

⁹ Terra-cotta, B, fig. 94; vases, Heydemann X = B, fig. 362; Zahn n = B, fig. 369; Zahn p = B, fig. 393.

¹⁰ Bieber, *Denkmäler*, no. 88, pl. 73/3; cf. the vases mentioned above in n. 3.

The likeness between the terra-cottas and the figures on the Phlyakes vases fully justifies Körte's judgement that the dress of the Phlyakes repeats in all essentials the dress of Old Comedy, except that Old and Middle Comedy would be a happier description, since nearly all the vases and many of the terra-cottas belong to the period of the Middle Comedy rather than of the Old. It is therefore reasonable to go on and ask how far the Phlyakes vases and Middle Comedy can be used to interpret each other. We may start with parody of mythological scenes, known to be one of the main lines of Middle Comedy. Terra-cottas from Athens and a vase in Leontini may be interpreted as the story of Herakles and Auge. There are two sets of terra-cottas: one of them2 belongs to the fifth century and has only three figures, Herakles, Auge, and a man in a traveller's cap, who must be the returning Aleus; the other set,3 which dates from the second quarter of the fourth century, adds nurse with baby, man with basket, man with pitcher on his head, and seated slave; on the vase,4 Herakles starts back as he unveils Auge, an old man and an old woman look on. This I take to be a parody of the moment in the Euripidean play when Herakles arrives just in time to save Auge. The old woman is presumably the nurse of the later set of terra-cottas. The old man, wearing shoes and himation, is unlikely to be a slave, and must therefore be Aleus, who looks on in disapproval. We know of two comedies called Auge, one by Philyllius, a poet of the Old Comedy, and the other by Eubulus, who was writing from the 70's till at least the 40's of the fourth century.5 Philyllius' Auge may have been the model for the earlier set of terra-cottas and Eubulus' Auge for the later set and the vase: the remaining fragments of both plays are descriptions of feasting, and the terra-cotta slaves of the later set are clearly naking preparations for feasting (the tradition of the greedy Herakles survives still in Diphilus-fr. 46 K).

On another vase of the same date and workshop,6 Herakles, conducted by Hermes, is astonished at the beauty of a woman who apparently resists his advances; the presence of Hermes suggested to Rizzo that this was the Alcestis story; if this is accepted, Antiphanes' Alcestis, produced 354 B.C., seems more likely as the original than the considerably earlier Admetus plays of Aristomenes and Theopompus. Eubulus is more likely than Hermippus or Plato to have provided the original for Herakles and the Kerkopes on a vase⁷ of the early fourth century. Herakles knocking at a door accompanied by a servant on a mule may have been rightly interpreted as a reminiscence of Aristophanes' Frogs, although the painter has failed to show that the visitor is not Herakles himself, but Dionysus dressed as Herakles; Neugebauer dated the vase about 400 B.C.8 Other Herakles scenes cannot be certainly identified: Herakles pursuing a woman towards a window (early fourth century), Zeus kicking his feet in helpless fury while Herakles consumes the offerings put on his altar by an elderly worshipper (early fourth century), and Herakles apparently playing a similar trick at Delphi on Apollo, who sits in terror on the roof of his temple with a bow, but nothing but a laurel spray as ammunition (360/350 B.C.).9

¹ Körte, op. cit., 86.

erra-cottas

tury, it is

he change

lually, but

d it seems

legislation

complete,

e phallus.2

y of cases

, be dated

hallus. It

Athenian

n between

ly and the

ra-cottas.

c costume

An Attic

ay also be

rakleis on

d her hair

he chariot

phlyakes

vases and

ence to be

contexts

century,

cottas are

sevidence

of a pair

ich recurs

ng pedlar

t hanging

e-carrying

the New

62: for the

B, fig. 400.

ieces found

vases with

rk sets (B,

ns look as later than

found in

80, 82 (with

Ieydemann

Heydemann

69; Zahn p

3/3; cf. the

² B, fig. 111; 113 (need not be interpreted as Odysseus; Oedipus wears a *pilos* on the phlyax vase, *Philol*. 1897, pl. 1); Bieber, *Denkmäler*, pl. 75/2. According to Bieber, *Denkmäler*, 130, 136, examples of all three found in the same grave in south Russia which she dates about 400 B.C. (Compte-Rendu 1869, 146, 152); an example found in Delphi (Fouilles de Delphes, v. 163) she dates in the fifth century.

³ B, figs. 122-8 (cf. above, n. 2).

lxiii. 107, cf. 93 (350-325 B.C.).

5 If his Nannion is about the hetaira Nannion, it cannot be before the forties, since Nannion is also mentioned by Menander (524 K).

⁶ Zahn e = B, fig. 360; Rizzo, Röm. Mitt. xv, 1900, 261 ff.

⁷ Heydemann O = B, fig. 357.

8 Heydemann R = B, fig. 356; Neugebauer, Führer, 141.

⁹ Heydemann f = CVA Gt. Br. 84/8; Heydemann p = B, fig. 354; Heydemann q = B, fig. 355 (Trendall, Paestan Pottery, 37).

⁴ Heydemann M = B, fig. 358; Beazley, JHS,

Zeus appears in equally undignified situations on other vases: on one, guided by Hermes with a small lamp, he climbs a ladder to the window of his mistress (350/340 B.C.)—the date is perhaps too late for Plato's Nyx Makra, but it should be noticed that the play contained the line (85 K): 'the guides will have lampholders clearly'; if this is a prophecy of Zeus' state arrival, it is an admirable reverse preparation for Hermes and his tiny lamp. Plato treated another love affair in the Europa, where Zeus discusses with Hermes (?) whether it is better to take Europa asleep or awake (43 K). Zeus appears as a reveller on two other vases, but there is nothing to determine the context, nor can we provide a literary source for a scene where Zeus Ammon (identified by the palm tree) is visited by a traveller (perhaps Odysseus?), while the traveller's slave hurries off in another direction to enjoy himself.2 The birth of Helen is the subject of another vase (first half of fourth century):3 Leda looks on from the doorway; Hephaestus has already smashed the egg, and Tyndareus stops him making a further stroke which would be fatal to Helen. The subject may have been treated in Eubulus' Leda and Alexis' Helen and/or Tyndareus. On another vase4 a young man holds up a baby to a young woman, while an old man (again not a slave because he wears mantle and shoes) walks away in astonishment. We have apparently no instance from these vases of an ordinary Athenian unbearded: shaven youths are either policemen or thugs or characters from mythology. This young man must then be a character from mythology (which also suits the elaborate architecture) and cannot be Herakles. Could it be Hermes or Apollo giving Ion to the Pythia in Eubulus' Ion? If so, the old man may be Zeus or Xuthus. But the absence of attributes makes interpretation doubtful. A very similar scene, reduced to the human level (Parmeno, Moschion, Chrysis), occurred in the first act of Menander's Samia.

Odysseus has been recognized on several vases by the felt cap (pilos) which he traditionally wears, although a pilos does not necessarily indicate Odysseus. On one (early fourth century) he and a younger man (Elpenor?) are threatening Circe with swords; Ephippus and Anaxilas both wrote a Circe; Anaxilas must have written before the middle of the century because he mentions Plato (14 K). On a second (early fourth century), Odysseus is greeted by a rather fierce-looking Arete and a more forthcoming Alcinous; here the source may have been Eubulus' Nausicaa. On a third vase (probably also painted before 350 B.C.) Odysseus carries off the Palladium and Diomede follows him; Heydemann comments: on other monuments, disregarding those which give a Palladium to each of the two heroes, it is always Diomede who seizes, carries away, or holds the statue. But this departure from the normal is, if I am not completely misled, the point of the comic scene: Odysseus, experienced and cunning as always, has somehow won the Palladium which Diomede stole, and hastens away with his booty chuckling, while Diomede runs vainly behind.

0

va

lo

an

be

in

(cc

wh

be

Te

Eu

COI

rid

alt

usi

wh

a s

sta

har

alta

to t

Eny

of I

a sk

tair

fron

shap

is e

duc

hard

the

was

1 6

Sphin

follov

be in

(Paes

Potter

3 7

5 T

6 F

 $t = \mathbf{F}$

perha

Potter

Paest

8 H

¹ Heydemann I = B, fig. 368; Trendall, Paestan Pottery, 39, pl. IX.

² Zahn m = Leroux, Vases in Madrid, pl. xcix; B, fig. 395 = CVA Italy, 743/3; Zahn n = B, fig. 369 (style and shape suggest a date before 350 B.C. and preclude Bieber's interpretation as Alexander's visit to Zeus Ammon; his cult was public in Athens before 370 B.C.).

³ Zahn o = B, fig. 365.

⁴ Zahn l=B, fig. 385. (I think the young man probably holds a child in swaddling-clothes and suggest the same interpretation for CVA British Museum pl. 87/5.) Comparison of the old man with 'Aleus' in B, fig. 358, and Hermes in B, fig. 360, suggests a date in the third quarter

of the fourth century. On the Samia see Rylands Bulletin, xxx. 134.

⁵ Heydemann A = B, fig. 389. Bieber (Denkmäler, 150) interprets as fight for a woman, but the woman clearly wants to get away and father—son rivalry, though a well-known comic theme, never took this form as far as I know. Professor Beazley suggests Odysseus and Diomede threatening Theano; but should not Diomede be characterized as a soldier (cf. Heydemann h)? Heydemann quotes an Etruscan mirror for Elpenor helping Odysseus to deal with Circe.

⁶ Heydemann m = B, fig. 363.

⁷ Heydemann h, figured on his p. 296.

Odysseus is the title of plays by Amphis, Eubulus, and Anaxandrides; Anaxandrides' play, which is dated between 374 and 357 B.C., is certainly early enough to have been the source.

It is more important to notice here a popular comic idea which turns up on other vases and in other comedies; it may be termed 'comic reversal of tradition', and the locus classicus is Aristotle Poetics (1453°36): 'those who are the worst enemies in the tradition like Orestes and Aegisthus become friends before they go out at the end, and no one is killed by anyone.' Another instance from the Odysseus story may well be the Odysseus weaving of Alexis (dated after 340 B.C. by the mention of Tithymallos in 157 K): Penelope presumably made Odysseus weave the shroud. In Plato's Phaon (contemporary with Aristophanes' Ecclesiazusae)1 Aphrodite becomes an old hag who extracts large sums from all the women who want to enjoy the favours of the beautiful Phaon (174 K). In Anaxandrides' Tereus (dated 370/360 B.C. by Polyeuctus), Tereus will be called a bird 'because the women have made mincemeat of him'. If Eubulus' Oedipus is the source of one of these vase-paintings,2 Oedipus was certainly completely at ease with the Sphinx in that play, even if he did not actually ask her riddles himself. Four other vases show the same kind of comic reversal of tradition. although we cannot point to a particular original: the most striking is the scene now usually called the rape of Ajax, because Ajax has fled to the Palladium for safety while Cassandra belabours him (soon after 350 B.C.).3 Another vase perhaps represents a slightly earlier moment of the same comedy:4 a man in travelling hat and cloak stands frightened in front of an altar behind which a fat woman holds out welcoming hands. Neoptolemus flinching before the long tirade which Priam delivers from the altar,5 and Antigone discovered, when arrested, to be an old man in disguise, belong to the same category of scenes.6

A kalyx-krater in the British Museum? (about 350 B.C.) with Daidalos fighting Enyalios before an enthroned Hera may echo a scene or narrative from the *Daidalos* of Plato or, more likely, of Eubulus. The healing of Cheiron⁸ (early fourth century) is a skit on healing-places, like the *Plutus* of Aristophanes and the *Asklepios* of Philetairos (cf. also Antiphanes 154 K). Xanthias pulls the old man up the steps from in front and another servant pushes him from behind (together they make a Centaur's shape); the nymphs of the spring look on from their grotto like two landladies; it is early for the *Cheiron* of the younger Cratinus, as his *Titans* was probably not pro-

duced before 340 B.C. (8 K); Nicochares' Centaur is also a possibility.

Other subjects are historical rather than mythological (though a Greek would hardly understand the distinction). Zahn has interpreted a bell-kratero (first half of the fourth century) as Alcaeus, purse in hand, bidding for Sappho's favours. Sappho was the title of comedies by Antiphanes (soon after 370, 196 K), Ephippus (rather

¹ See Wilamowitz, Sappho u. Simonides, 35 f.

² Philologus, 1897, pl. I. Silenus questions the Sphinx on a Paestan vase which Trendall, following Crusius and Watzinger, thinks may be inspired by Aeschylus' satyr play Sphinx

(Paestan Pottery, 68; B, fig. 22).

Paestan Pottery, 106.

⁹ Zahn r = B, fig. 371; see Zahn, Die Antike, 1931, 90 f. Professor Beazley notes as an objection that Alcaeus is not characterized as a poet. A laurel spray alone means poetry on two other vases on which I am inclined to see the same subject: Heydemann U = B, fig. 390, cf. also CV, Taranto, 743/2. Heydemann H = Annali, 1871, pl. I, has not, as far as I know, been fully interpreted; the tripod must mean Delphi and the long laurel staff must mark its aged owner as Apollo. Who then is the man with the lyre who stands as if corrected? Nicostratus wrote a Hesiod and it seems to me possible that this is Hesiod being warned by Apollo (like Callimachus later) not to copy the thunder of Homer.

oman, but and father aic theme.

ded by

350/340 noticed

early';

ion for

where

awake

ermine

mmon

nile the

f Helen

om the

making

treated

ng man

ause he

ntly no

ths are

ist then

re) and

ubulus'

makes

armeno,

hich he

On one

ce with

written

second6

e and a

aa. On

e Palla-

uments,

always

rom the

dysseus,

Diomede

behind.'

e Rylands

Professor de threatomede be mann h)?

n Circe.

96.

³ Zahn g = B, figs. 366-7; Trendall, Paestan Pottery, no. 32. ⁴ Dioniso IV, 284, fig. 5. ⁵ Theophilos' Neoptolemus is undated.

⁶ Heydemann Q = B, fig. 361; Heydemann t = B, fig. 364 (an earlier stage in the same scene perhaps on Moscow 735—Trendall, Paestan Pottery, 93). ⁷ Heydemann a = B, fig. 370. ⁸ Heydemann X = B, fig. 362; Trendall,

before 345 B.C., 20 K), Timokles (345/330 B.C., 30 K), and Diphilus; of these, Antiphanes is the most likely by date, but of Diphilus Athenaeus has recorded the interesting fact that he made Archilochus and Hipponax lovers of Sappho. Sappho in comedy had the double role of hetaira and setter of riddles.

loch

mid

a sla

beer

pret

the

a go

to b

which

beca

and

930,

not

polic

άνω

hand

and

inter

sense

an ia

left t

they

hyps

we fi

the e

παρέ

there

the s

(earl

the I

ladie

fourt Eubi

tion,

bran

we k

phan

home

the e

Knig

I C

2 B

26 (fu

schmi

Antip

'trago

727, V

theme

3 A

T

A

For the majority of the mythological and historical scenes on the Phlyakes vases we can suggest an Attic comedy which could chronologically have been the inspiration for the vase-paintings. Where we cannot give the name of the play, we can usually say that the painted scene is well in the tradition of Attic Comedy (e.g. the rape of Ajax). Where, however, the vases give comic representations of everyday scenes, we cannot hope to suggest a particular original, but only to give evidence for such-and-such a scene occurring in comedy.

One of the commonest themes of Middle Comedy is food and the slaves who buy, consume, or steal it. On a vase¹ of the first quarter of the fourth century, master and mistress, Philotimides and Charis, consume food off a tray while behind them the slave, Xanthias, hides a cake in his bosom. It is not necessary to quote examples for eating on the stage (e.g. Theopompus, 6 K); Xanthias' theft recalls Karion's theft of the pot in the Plutus and the slave in the Dyspratos of Epicrates (5 K), who complains that he is not allowed to eat the remains. Slaves carrying off cakes appear on two other vases;2 on another3 two slaves hurry off with what appears to be an enormous piece of dripping meat, preceded by a flute-player; Dr. Bieber compares the slaverevels at the end of Plautus' Stichus (Menander's First Adelphoi), although the vase is early fourth century. Marketing is, I believe, the subject of a vase in the Louvre,4 which has been interpreted as a bird-seller and his customer; the so-called bird-cage is, as Heydemann interpreted it, a large basket with which the man is going to buy provisions; fragments of Antiphanes (34, 68, 128-9), Nicostratus (6), and Ephippus (15) come from Middle Comedy marketing scenes. A bald man in an embroidered chiton chased by a long-nosed woman as he runs away with a cake and an amphora must, I think, be a parasite rather than a slave; the long-nosed woman, who on another vase expostulates with a snub-nosed woman, is an ancestor of Menander's Krobyle 'with her nose a cubit long' (402 K).5 The Paestan vase6 (about 330 B.C.) with an old man dragging along a younger man carrying a pail and phiale has been explained by Trendall and others as father and son, but Zahn must be right in calling it old man and slave; a son would not carry his own pail and phiale; the drunk slave occurs in fragments of Eubulus (126) and Alexis (25) as well as later in Menander (e.g. Ter. Ad. 725 f.).

Three other scenes of slaves being punished are all interesting: on the simplest (very early fourth century)? one slave beats another while a third mocks at him—a scene which Aristophanes in the Peace (737 f.) derides as vulgar, thereby proving its existence on the Attic stage in his day (cf. Frogs 616 f.). It survived till Menander's time: in the Perinthia (Pap. Ox. 855) Laches proposes to burn Daos alive as he sits on an altar and Sosias, another slave, gloats over him.⁸ The burning scene of the Perinthia has a long tradition behind it including a papyrus fragment in which a leno dedicates himself to Demeter^o (apparently Middle Comedy because the chorus take part in the action), Strattis' Zopyros perikaiomenos, and the singeing of Mnesi-

- ¹ Heydemann D = B, fig. 374.
- ² Heydemann e = CV British Museum, 38/2; Heydemann l = B, fig. 396.
 - 3 Zahn s = B, fig. 378.
 - ⁴ Heydemann k = B, fig. 384.
- Fleydemann S = B, fig. 375; for the parasite mask cf. B, fig. 249 (New Comedy, but the parasite was already established in Attic comedy by the time of Eupolis). For the woman cf.
- B, fig. 398, and perhaps the Cassandra of Zahn g (see p. 23, n. 3).
- ⁶ Heydemann g = B, fig. 391; Trendall, Paestan Pottery, no. 139; Zahn, F.R. iii. 183.
 - ⁷ Heydemann N = B, fig. 380.
- 8 See Rylands Bulletin, xxx. 373 f.; cf. also J. J. Tierney, Proceedings of the Royal Irish Academy, 1945, 54, on slave punishments in New Comedy.
 - 9 Page, Greek Literary Papyri, no. 48.

lochus in the Thesmophoriazusae (725); in this tradition stands also a vase of the mid-fourth century, in which an old man with a stick and burning torches approaches a slave seated on an altar and holding a suppliant's branch; his crime has apparently been to steal a cake, which now lies on the ground. The most difficult scene to interpret is the Tarporley Painter's kalyx-krater in New York (rather before 380 B.C.);² the old woman has found the slave stealing in her larder; he was making off with a goose and a kid; she has summoned a policeman, who has tied him up and is going to beat him. 'Tragoidos' looks on, perhaps because the scene comes from a comedy which parodied tragedy (and the elaborate architecture of the door suggests this), or because the scene itself parodied tragedy like the scene of Mnesilochus, the old woman, and the Scythian in the *Thesmophoriazusae*, which is our best guide, cf. particularly 930, 1001.3 The snub-nosed slave mask above I take to be an indication that this is not tragedy but comedy. Inscriptions come out of the mouths of the characters: the policeman says: NOPAPETTEBΛO. The slave, who is being beaten, says: κατέδησ' ἄνω τὼ χεῖρε 'He has tied my hands above'. The old woman says: ἐγὼ παρέξω 'I will hand him over'.4 Whatmough⁵ hoped to find Messapian in the policeman's words and failed; he proposed, therefore, to read it backward as ολβέττερ' ἄρον, which he interpreted as 'lift the basket'. This presents two difficulties: first, it does not make sense for the policeman to say 'lift the basket'; secondly, it is impossible metrically an iambic catalectic line cannot end --| -- |. If the letters be read as nonsense from left to right, i.e. starting from the mouth of the speaker like the other two inscriptions, they scan oco-c (assuming that the final omikron stands for omega or omikron hypsilon), i.e. the first metron of the complete iambic tetrameter catalectic, such as we find in Plato's Laconians (69 K). Alternatively, Professor Beazley suggests altering the order to read as iambics: Α. κατέδησ' ἄνω τὼ χείρε. Β. νωραρεττεβλω. | C. έγὼ παρέξω. Whatmough has, however, established that it is not Messapian; it may therefore be bogus-Thracian or Scythian, and there is every reason to suppose that the scene comes from an Attic comedy.

A picture of an old man with a stick, walking ahead of a very heavily laden slave (earlyish fourth century), 6 reminds us of Chremylos and Karion at the beginning of the *Plutus* (cf. also *Eccl.* 833, 867). The little slave Sikon, who pops up between two ladies, one apparently driving off the other, on a Paestan vase 7 (second quarter of fourth century) has a name known from Aristophanes (*Eccl.* 867), Alexis (25 K), and Eubulus (126 K); it seems to me possible that he has been overhearing their conversation, a type of scene well known in New Comedy.

To return, however, to the scenes of feasting from which we started: a reveller brandishing two torches on a vase of 350/3408 is the only instance of a figure which we know from Aristophanes (Eccl. 691, 1151; Plutus 1194, cf. Strattis 37 K) and Antiphanes (272 K). The elderly reveller occurs on several vases; once making his way home rather unsteadily and twice leaning on a stick and cheerfully holding forth; the elderly reveller in comedy may be a convert from severity like Demos in the Knights and Demeas in the Adelphi (between these we can add Anaxandrides' rustic,

iphanes

ing fact

edy had

es vases

piration

usually

rape of

scenes.

r such-

ho buy,

ter and

em the

ples for

theft of

nplains

on two

ormous

slave-

ne vase

ouvre,4

rd-cage

to buy

ous (15)

chiton

must,

er vase

e 'with

d man

ed by

d man

curs in

g. Ter.

mplest

im—a

ing its

nder's

he sits

of the

hich a

chorus Mnesi-

Zahn g

endall,

so J. J.

ademy,

edy.

83.

¹ CVA Italy 745.

² B, fig. 381 = Trendall, Frühitaliotische Vasen 26 (further literature is quoted there); Messerschmidt, Röm. Mitt. xlvii, 1932, 134 ff.

³ Another beating scene in Middle Comedy, Antiphanes 74 K. Professor Beazley suggests 'tragoidos' is a tragic actor waiting his turn.

⁴ Dr. O. Skutsch refers me to Pl. *Epid.* 716, 727, which is a later variation on the same theme

⁵ Harvard Studies, 1928, 3 f.

⁶ Zahn p = B, fig. 393.

Trendall, Paestan Pottery, no. 16, fig. 10.
 Heydemann W = Bulle, Festschrift für Loeb, fig. 18; Trendall, Paestan Pottery, 70.

⁹ Heydemann F (cf. above, p. 20, n. 3); Heydemann V = B, fig. 394 (cf. above p. 20, n. 3, and for the pose the rather earlier terracotta, B, fig. 91); Heydemann c = B, fig. 402 (Xanthias may be a mistake of the painter).

we d

Aris

mor

ours

the

were

som

sugg

chor

acte

Yet

conr

sugg

orch

sugg

alon

1

I

1

frr. 1–3) or naturally cheerful like Micio in the Adelphi and the speaker of some lines from Philetairos' Kynagis (fr. 7, about 360 B.C.). Two vases of the mid-fourth century¹ show an old man making love to a young woman; we have earlier evidence for this than Menander's Synaristosai (about 315 B.C.) in a fragment of Plato's Phaon (178 K, 392 B.C.). A stern father dealing with his son appears on a single vase² which probably belongs to the Middle Comedy period; links between Strepsiades of the Clouds and the fathers of New Comedy are provided by fragments of Antiphanes (2, 40, 122, 235 K), Alexis (108 K), and Mnesimachus (3 K), though none of these can be even approximately dated.

The escapades of the young appear several times: a man tries to lay hold of a girl as she disappears through a doorway (early fourth century)³—this is one version of the door theme which appears in various forms in comedy: in the *Peace* (950) wives who want lovers peep out of doors, like the old hag in the *Ecclesiazusae* (884); the young man in the *Ecclesiazusae* (960) sings a song before the girl's door like the much later lover of the *Curculio*; the hero of Nicostratos' *Apelaunomenos* (cf. Aristophon fr. 3) was perhaps driven away from a hetaira's door like Chairestratos at the beginning of Menander's *Eunuch*. A Paestan vase⁴ has a lover climbing a ladder to give his mistress fruit, an everyday parallel to the Zeus scene discussed above; the ladder theme we know from Plato (21 K) and Xenarchus (4 K) and the apple theme from Antiphanes (58 K).

That unwanted children occurred in Middle Comedy as well as New Comedy seems clear, although the literary remains are silent: two of the terra-cottas,5 the nurse with baby from the set connected above with Eubulus' Auge and a standing slave carrying a child (from Tanagra), belong to the Middle Comedy period (the seated slave with baby⁶ is rather a contemporary of Mnesilochus in the Thesmophoriazusae and the walking slaves7 from Athens and Tarentum with megaphone mask and no visible phallus belong to the New Comedy). To these, we can add one vase, 8 in addition to the Ion (?)9 mentioned above: a man (probably not a slave as he has shoes, mantle, and stick) discovers astonished a child lying on the ground; this is an ancestor of the scene in the Andria/Perinthia (740 f.) where Chremes sees the baby deposited by Mysis. The writing scene on a vase (early fourth century), 10 in which an old countryman has his accounts or debts checked by a slave-steward and a woman (perhaps an heiress-wife), has several analogies in Aristophanes, both in the Clouds (19) and the Kokalos (348 K), in Alexis (15 K), and later in Menander (Com. Flor. 46). Finally, the scene on a Paestan vase (mid-fourth century)11 in which an old man tries to defend his money chest while he is beaten up by two thugs and his slave looks on too frightened to help, has no parallel in Attic comedy, but the possibility of such a scene is given by the references to such performances in Antiphanes (119, 120, 190/16 K, cf. also Philemon, Page, Greek Literary Papyri, no. 50).

The major gain of considering these scenes on south Italian vases is undoubtedly that they show us what scenes in Middle Comedy looked like, and that is a certain gain, because the terra-cottas show the identity of costume; whether the vase in Leontini represents Eubulus' Auge or not, it is certain that the actors in Eubulus' Auge looked like the figures on the vase. If the probability that the vases represent scenes from Attic Comedy is accepted, we learn of scenes in Middle Comedy which

^I Heydemann i = JHS, vii, pl. 62. I (a slave looks on in astonishment); Zahn i = B, fig. 377.

² Zahn q = B, fig. 392. See above, p. 20, n. 3.

³ Heydemann d = B, fig. 388.

⁴ Heydemann b = B, fig. 387.

⁵ B, fig. 122 (cf. p. 21 above); Körte, *Jb*. 1893, 79, no. 26.

⁶ Bieber, Denkmäler, no. 89 a, pl. 73, 1.

⁷ Bieber, Denkmäler, no. 89 b, c, pl. 73, 2-3.

⁸ Heydemann n.

⁹ See p. 22, n. 4, above.

¹⁰ Heydemann r = B, fig. 383.

¹¹ Heydemann P = B, fig. 373; Trendall, Paestan Pottery, no. 31.

we did not know before and we are able to fill some gaps in the comic tradition between Aristophanes and Menander, and this makes it possible to appreciate better how far the poets of the New Comedy were indebted to the comic tradition, besides making more intelligible Aristotle's judgement that Comedy represents men 'worse than ourselves', and providing further examples for the comic 'reversal of tradition'. If the identification is not accepted, the vases still portray comic performances which were contemporary with and analogous to Middle Comedy and therefore still throw some light on it.

None of the south Italian vases, tragic or comic (except the *Eumenides* scenes), suggests the presence of the chorus and it seems at least possible that they had no chorus. As far as we know, Comedy from the time of the *Ecclesiazusae* could have been acted without a chorus without much loss or with a much reduced chorus with no loss. Yet the staging of the Phlyakes vases with its central steps implies the need of a connexion between stage and orchestra rather than stage and parodoi. Does not this suggest that the staging was copied from Athens, where the connexion with the orchestra was still sometimes needed?

In conclusion I should like to express my gratitude to Professor Beazley for many suggestions, most of which I have accepted; for the errors that remain I am of course alone responsible.

T. B. L. Webster.

MANCHESTER UNIVERSITY.

eginning give his e ladder me from Comedy as,⁵ the tanding e seated viazusae and no

me lines

century

for this

(178 K.

robably

and the

235 K),

approxi-

of a girl

ersion of

o) wives

84); the

ne much

stophon

and no in addis shoes, ncestor eposited ountryhaps an and the illy, the defend

abtedly certain vase in ubulus' present

fright-

I. 3, 2-3.

rendall,

STYLE AND THOUGHT IN PLATO'S DIALOGUES

C the w

Char-

tence

each

tions

outra

beset

not v

and :

ford'

gives

of so

the a

way

åλλ'

ment

rejoi

δίκαι

προσ

έξελέ

Socra

τοιού

K

G

A

E

E

T

A

the p

to a

effec

critic

in te

of th

Σ

1

fact.

says

the 1

in te

T

In for th

The study of Plato's style as a writer has hardly kept pace with the study of his thought as a philosopher. Obviously he stands apart as the one original thinker in classical antiquity who also gives expression to his thought in a finished literary prose; and obviously his prose is worth studying for its own sake. What I would here suggest is that the close and continual relationship between the style and the content of his work may serve, in various aspects, to elucidate his argument; and, further, that at certain points his style itself has a direct connexion with his philosophic thought.

The word 'style' is here to be taken in a rather wide sense, as including a number of Plato's characteristics as a writer. The choice of the dialogue form comes first for consideration, determining as it does the whole trend of his style, syntax, and vocabulary in detail. Why did he decide to write in dialogues? To perpetuate the memory of Socrates, the informal talker; to experiment, in the field of philosophy, on the lines followed by the Sicilian mime in the field of social life; to satisfy his own deep-rooted love of drama, attested (precariously perhaps) by the tradition about his early activities and much more surely by a mass of significant detail in his work as we have it. All these motives may have operated. But another may be suggested, not indeed quite separable from his love of drama, but perhaps worth considering apart. The essence of dialogue lies in the interaction of human minds. For Plato the human individual—whether as percipient, as moral agent, or as spiritual being stands in the centre and forefront of his thought. Here he is obviously following Socrates, but he develops the theme in his own ways, and he seldom strays far from it. Because this is his central interest, it becomes natural to express all his thought in the form of personal utterance by one individual or another (not necessarily or always by the Socrates who is normally the chief speaker), and to work out its development in terms of progressive agreement between such individuals. Plato's thought. in its farthest reach, still carries the quality and the limitations of a Socratic λόγος, as being the outcome and expression of a human ὁμολογία.

The word 'development' may be further stressed. It is no doubt generally agreed that Plato's thought as a whole proceeds by stages, or through phases, which admit of fairly clear distinction. But in brief or popular expositions of his philosophy the fact is still apt to be ignored or glossed over, at peril to any consistent or clear interpretation of his message. The theory of soul, theory of knowledge and of being, ethical and political principles, all alike pass, with him, through a process of change and modification; and only so can they be fairly understood. There should no longer be any doubt as to the general sequence of the dialogues, at any rate in groups; 'stylistic' in the specialized sense has established the order probable on grounds of literary quality and philosophic content. The outstanding exception is the *Phaedrus*, which on all such other grounds would appear to belong to the middle period, but which stylistic places late. So much of its language and style is frankly artificial that it probably should not be measured by the canons applicable elsewhere.

The general fact of Plato's development being agreed, it may be urged further that even at any given stage in the process his findings may tend to be approximate rather than definite—not only reached by a $\gamma \acute{e} \nu \epsilon \sigma \iota s$, or (to put it in terms of the dialogue form) a $\delta \rho \hat{a} \mu a$, but still and perpetually in a fluid condition. Is the influence of Heraclitus operative here too, as in his attitude to material things? This sense of the inchoate and incomplete in argument seems at certain points to be no mere question of $\epsilon \iota \rho \omega \nu \epsilon \iota a$ in expression, but to correspond to something fundamental in his thought. An example will be considered later.

Concentrating for the moment on the dialogue form itself, we may note some of the ways in which the interplay of persons is used to help out the exposition of thought. Characterization as such is perhaps hardly a matter of style as usually understood; but the violence and rudeness of Thrasymachus (for instance), the trenchant persistence of Kebes, and the well-meaning vagueness of Simmias, pointed as they are in each case by the shape of phrases and the choice of words, are also obvious contributions to the argument. Thrasymachus' behaviour is an object-lesson against the outrageous doctrine he upholds; Kebes personifies the hard, intransigent problems besetting the question of survival, while Simmias embodies the wistful hope which, not very strong on logic, looks always towards some $\theta \epsilon \hat{\imath} os \lambda \delta \gamma os$ for its support.

In the main body of a discussion, where personalities (even that of Socrates) are for the time being subordinated to subject, the recurrence of the formulae of question and answer may become non-significant or even tedious. The late Professor Cornford's bold experiment, in his version of the *Republic*, of suppressing many of these gives an attractive continuity to the argument and may perhaps be justified in terms of so long a dialogue. But there are numerous places, there and elsewhere, at which the actual give and take of conversation imports its own contribution (usually by way of added emphasis) to the thought of the passage.

Thus (e.g.) at Gorgias 515 d, Callicles replies "Ισως. Οὐκ ἴσως δή, says Socrates, ἀλλ' ἀνάγκη ἐκ τῶν ὡμολογημένων—at once underlining the cogency of the argument.

Several times the same effect of emphasis and importance is conveyed by a serious rejoinder to a flippant or a sarcastic remark.

Republic 339 a-b, where Socrates observes that Thrasymachus' definition of δίκαιον adds to ξυμφέρον the qualification τοῦ κρείττονος.—Σμικρά γε ἴσως, ἔφη, προσθήκη. Οὕπω δῆλον οὐδ' εἰ μεγάλη. It is indeed to prove 'a great addition'.

Gorgias 473 b. ΠΩΛ. 'Αλλ' ἔτι τοῦτ' ἐκείνου χαλεπώτερόν ἐστιν, ὧ Σώκρατες, ἐξελέγξαι—a piece of sarcasm.

ΣΩ. Οὐ δῆτα, ὧ Πῶλε, ἀλλ' ἀδύνατον τὸ γὰρ ἀληθὲς οὐδέποτε ἐλέγχεται.

At Republic 498 d a deeper effect is produced by the same device. We may, says Socrates, do our friends some service εἰς ἐκεῖνον τὸν βίον, ὅταν αὖθις γενόμενοι τοῖς τοιούτοις ἐντύχωσι λόγοις.

Είς μικρόν γ', έφη, χρόνον εἴρηκας.

y of his

thinker

literary

would

and the

t; and,

s philo-

number

first for

x, and

ate the

sophy,

nis own

out his

s work

gested,

idering

Plato

eing-

lowing

r from

ought

rily or

velop-

ought,

λόγος,

agreed

admit

y the

inter-

being,

hange

onger

oups;

ids of

edrus.

, but

ificial

rther

mate

f the

ience

sense

mere

al in

Είς οὐδὲν μὲν οὖν, ἔφην, ὥς γε πρὸς τὸν ἄπαντα.

The rejoinder, with its momentary reference to that 'whole of time' within which the periods between human rebirths are as nothing, gives the added touch of solemnity to a passage full of ethical feeling.

Another example from the *Republic* imports, by the medium of conversation, an effective change of tone and also (it may be suggested) a possible touch of self-criticism, a drawing back from a position not fully established, or not fully provable in terms of reason.

At 509 b Socrates has worked up through the analogy of the Sun to his description of the Good as source of all truth and all being, and ends thus:

ούκ οὐσίας ὄντος τοῦ ἀγαθοῦ, ἀλλ' ἔτι ἐπέκεινα τῆς οὐσίας πρεσβεία καὶ δυνάμει ὑπερέχοντος.

Καὶ ὁ Γλαύκων μάλα γελοίως, "Απολλον, ἔφη, δαιμονίας ὑπερβολῆς. Σὑ γάρ, ἦν δ' ἐγώ, αἴτιος, ἀναγκάζων τὰ ἐμοὶ δοκοῦντα περὶ αὐτοῦ λέγειν.

The tone of conversation has been effectively lowered from rhapsody to matter of fact. But it is also noteworthy that Socrates, encouraged to go on with his exposition, says no more about a transcendent Good ἐπέκεινα τῆς οὐσίας, but opens the topic of the Divided Line, in which the goal becomes an ἀρχὴ ἀνυπόθετος, conceived merely in terms of knowledge.

Probably other examples could be found in which the seemingly spontaneous play of conversation has its bearing on the establishment or the development of thought.

one

follo

is cl

bell

οἰχό

èθέλ

mar

cutt

τελε

Her

imn

on a

caus

atm

πολι

colo

ξυγη

λέγε

and

styl

here

proj

dece

thou

is m

θαρρ

τῶ (

είμα

τραγ

πρά

the

wor

'It'

bod

δή ·

mys

and

othe

uses

exa

Tak

έγγι

Pla

The element of humour, which appears in the instance just given, is of course strong in most of the dialogues. As a rule it is bound up with the conversational form, and it is frequently a strong element in characterization. Socrates is the chief contributor of humour, but not the only one; Laches' dryly told anecdote about Stesilaos and his δορυδρέπανον is a good early example, introduced by a neat piece of word-play—ώς ἀληθῶς ἐπιδεικνύμενον οὐχ ἐκόντα, 'making an involuntary exhibition of himself' (Laches 183 c ff.). The dialogues of the middle period are richest in humour, and it seems to correspond in general to a phase of free speculation and poetic fancy in Plato's thought. In the Euthydemus farcical absurdity of language and banter shows up the irresponsible attitude of the Sophists, as against the serious tone of the main conversation between Socrates and Crito. In the Phaedo, humour helps (as will be shown below) along with mythological references to relieve tension and to punctuate the phases of argument. With the Theaetetus humour begins to become rather laboured (as in the jest about μαιευτική), and in later works it is rarer and is often sardonic in tone. This corresponds no doubt to a natural change in temperament, and also matches the increasing austerity and abstractness of the argument.

The general tone of informal conversation naturally tends to give a humorous or playful effect to the various embellishments of Plato's style—quotations from the poets, references to myth (besides his own extended myths and allegories), illustrative anecdotes in smaller number, proverbs cited and applied, many similes and metaphors, and a large element of word-play. The incidence of these types varies: thus poetic quotations are more numerous in the middle dialogues, proverbs in the later. Some of these features have had special study, e.g. the use of proverbs in several brochures of the past, and the use of figurative language in a valuable recent book, Pierre Louis's Les Métaphores de Platon. Apart from their value under the purely literary aspect, the present question is the possible relation of these elements in Plato's style to the exposition or even to the content of his thought.

Quotations from the poets and references to proverbs or myths appear most naturally and most frequently in the interludes of personal encounter, rather than in the course of philosophic argument itself. Plato's usage, in this respect, frequently helps to make clear the pattern of the discussion, and also to distinguish in it the incidental from the intrinsic.

A few instances may be taken from the *Phaedo*, in which the alternations of mood and style are particularly interesting.

At 72 b-c the reasonableness of ἀνταπόδοσις is pointed by two playful analogies. If all were sleep and no waking, πάντ' ἄν λῆρον τὸν Ἐνδυμίωνα ἀποδείξειεν καὶ οὐδαμοῦ ἄν φαίνοιτο—a mythical reference coupled with a colloquialism. Again, if all were mixture and no separation, τάχ' ἄν τὸ τοῦ ἀναξαγόρου γεγονὸς ἄν εἴη, ὁμοῦ πάντα χρήματα—a maxim of philosophy which has evidently become a cliché. From this point on the discussion continues, without embellishment, in a serious though brief argument on ἀνταπόδοσις and then a longer, also serious and uninterrupted, debate on ἀνάμνησις.

At 77 d the reference to childish fears brings in humour and pathos combined. Men fear, like children, lest the departing ψυχή be dispersed by the wind—especially when a man dies with a gale blowing. Kebes replies ἐπιγελάσας . . . ἴσως ἔνι τις καὶ ἐν ἡμῖν παῖς, ὅστις τὰ τοιαῦτα φοβεῖται . . . ιωσπερ τὰ μορμολύκεια. ᾿Αλλὰ χρή, ἔφη ὁ Σωκράτης, ἐπάδειν αὐτῷ. . . . Πόθεν οὖν, ἔφη, ὡ Σώκρατες, . . . ἐπωδὸν ληψόμεθα, ἐπειδὴ σύ, ἔφη, ἡμᾶς ἀπολείπεις; This little interchange, fraught with personal feeling and carrying

one of the recurring reminders of the actual situation, is a perfect foil to the next following section, in which the argument from the soul's affinity with the Forms is closely reasoned and is relieved neither by pleasantry nor by illustration.

taneous

ment of

f course

sational

he chief

e about

at piece

hibition

chest in

ion and

inguage

serious

humour

tension

begins

ks it is

change

of the

rous or

om the

strative

aphors,

poetic

Some

chures

Pierre

iterary

's style

r most

r than

uently

it the

mood

logies.

υδαμοῦ

l were

πάντα

n this

brief

lebate

bined.

ecially

kai èv

ράτης,

, ἔφη,

rying

At 89 b, at the close of the interlude between Phaedo and Echecrates which itself marks a crisis in the argument, comes the playful and pathetic passage about Phaedo's cutting his hair. Τήμερον, ἔφη, κἀγὼ τὰς ἐμὰς καὶ σὺ ταύτας, ἐἀνπερ γε ἡμῖν ὁ λόγος τελευτήση καὶ μὴ δυνώμεθα αὐτὸν ἀναβιώσασθαι. A mythical reference follows—even Heracles is not a match for two antagonists, but needs an Iolaus to help him. Then immediately comes the serious and sustained warning against μισολογία, which leads on again to the close argument on the ἀρμονία theory.

The passage (96 a ff.) in which Socrates describes his search for a principle of causation is rather markedly informal in style, with touches of humour and a general atmosphere of $\epsilon i \rho \omega \nu \epsilon i a$, leading up naturally to the introduction of the $\epsilon i \delta \eta$ as $\epsilon \kappa \epsilon i \nu a \tau a$ πολυθρύλητα. Here, again, there follows a contrasting section of close and mainly colourless argument, with a touch of relief in Socrates' apology (102 d) for speaking $\xi \nu \gamma \gamma \rho a \phi \iota \kappa \omega s$.

The gradual transition, later, to the passage of myth and description is marked by one or two references to literature and legend—108 a odx & & Aloxidov Theorem λ figs. . . . , 108 d odx λ Flavkov τ fixed—and by a number of phrases suggesting vagueness and hearsay—e.g. 107 d λ fixed od odx λ contains to its content, and it is unnecessary to dwell here on the numerous similes and comparisons, including an example of continuous proportion (λ fixed λ contains λ content, and λ contains λ continuous proportion of the whole. But it is to the point of the present study to note, familiar though it be, the artistry by which the phase of myth is brought to a close and return is made to the first theme of the dialogue.

At 114 d comes a direct reminder of the original argument. ἀλλὰ τούτων δὴ ἔνεκα θαρρεῖν χρὴ περὶ τῇ ἐαυτοῦ ψυχῇ ἄνδρα, ὄστις . . . κοσμήσας τὴν ψυχὴν οὐκ ἀλλοτρίω ἀλλὰ τῷ αὐτῆς κόσμω, σωφροσύνῃ (a word-play?) . . ., περιμένει . . . ώς πορευσόμενος ὅταν ἡ εἰμαρμένη καλῇ. ὑμεῖς μὲν οὖν . . . εἰσαῦθις . . . πορεύσεσθε · ἐμὲ δὲ νῦν καλεῖ, φαίη ἄν ἀνὴρ τραγικός, ἡ εἰμαρμένη, καὶ σχεδόν τί μοι ώρα τραπέσθαι πρὸς τὸ λουτρόν · . . . καὶ μὴ πράγματα ταῖς γυναιξὶ παρέχειν νεκρὸν λούειν.

φαίη ἂν ἀνὴρ τραγικός serves (as Archer-Hind's admirable note points out) to lower the tone at once, leaving εἰμαρμένη as a piece of half-playful εἰρωνεία. The next words are easy and colloquial—σχεδόν τί μοι ὥρα . . .—and νεκρόν is plain and realistic. 'It 's about time I went to the bath . . . to save troubling the women to wash a dead body.'

All that follows is informal in style. At 115 d the phrase οἰχήσομαι εἰς μακάρων δή τινας εὐδαιμονίας has been variously taken. Burnet finds δή here 'allusive and mysterious', as at 107 d; Wagner says 'the expression is made emphatic by both δή and τινας'. In the present context, and in conjunction with μακάρων (which Plato otherwise uses only in the phrase μακάρων νῆσοι), δή τινας seems to echo indeed previous uses for impressive effect (107 c and 108 d), but to import now a note of irony and exaggeration. Socrates once more deprecates lofty language about his own future. Taken thus, the phrase leads on naturally to the pleasantry of the next sentence—ἐγγυάσασθε οὖν με πρὸς Κρίτωνα κτλ.

Analysis on the above lines, while it may be said to relate rather to the setting of Plato's thought than to the thought itself, should serve also to throw light on the

relative bearing and importance of the parts of a dialogue. It seems possible that one might go farther, and gain some clue here and there to Plato's actual belief. from study of the style and manner in which a topic is treated. In re-reading the Phaedo I was struck by the entire absence of literary ornament, or playful illustration, from the passage (81 e-82 b) which sets forth the doctrine of transmigration and the kinds of creature into which the previously human ψυχή may be transferred. Had Plato wanted to embellish this theme, how easily he could have referred to the witchcraft of Circe or other fables of metamorphosis, or found some apt quotation to apply to the πολιτικον καὶ ημέρον γένος of the nobler insects! But he does not bring in any such material to enliven a topic which would obviously admit of light or grotesque treatment. Now it seems worth noting that the other passages referring to the doctrine (Phaedrus 249 b, Republic 617 d ff., Timaeus 42 b ff. and 90 e ff.) all show the same plain, objective, unembellished style. In the Republic passage there are indeed some touches of humour, e.g. the soul of Odysseus looking about for a quiet life and finding a discarded specimen in a corner. But these references are to the special matter of the choice of a next life, not at all to the law of metempsychosis in itself. It is still debated whether Plato seriously believed in transmigration, or merely used the theory as a myth to convey ethical admonition. It may be suggested that his uniformly plain and serious treatment of the topic bears out the view that he did believe in the doctrine itself.

One may contrast the description (Republic 414 c) of the fable about the different 'metal' types of birth as Φοινικικὸν ψεῦδος—not merely a fable for a purpose, but comparable to the myth of the γηγενεῖs of Thebes. This bit of lore is not seriously

used, and can therefore be the subject of a mythical reference.

Passing allusion has already been made to Plato's use of metaphor, and to Dr. Louis's valuable work on the subject. In Les Métaphores de Platon he makes an advance on previous study by analysing not only or primarily the fields from which metaphors are drawn, but the ideas to which they are applied. As I have suggested elsewhere, this line of treatment opens the possibility of fresh, or at any rate clearer, light on Plato's actual thought. His figurative language varies in strength and effectiveness, and more might be done to distinguish virtually 'dead' metaphors (e.g. σκοπείν of inquiry, μέθοδος of a line of argument) from those which import clear images and which are to be studied along with the explicit similes. In this latter field, Plato's metaphors of light, including as they do both the natural light of sun or fire and the αὐγὴ καθαρά of the Mysteries, serve to mark in his theory of knowledge the blending of natural processes and of supra-sensual experience; his figures of ascent and conversion emphasize the strongly ethical element in his treatment of education; the imagery of the relation between soul and body makes clear his indebtedness (for all his criticism of certain details) to the Orphic school; and the various figures of conflict and debate as between the 'parts' of soul indicate as clearly as the anecdote of Leontius (Republic 439 e) his strong sense of the existence of different factors in the human personality, and herein his advance in psychological insight upon the Socratic position. These are familiar instances and perhaps obvious deductions. But they may point the usefulness of further exploring Plato's use of metaphorical language in relation to ideas, and the possibility of fresh light, if not on his actual doctrine, at least on his attitude and approach.

Nothing is clearer about Plato's general use of language than his interest in words and his feeling for their proper application. This is brought out in his word-play, and in his various methods of emphasis, as strongly as in his figurative expressions; and it all goes to support the view that he uses all language with conscious discrimination, so that with him metaphor or simile must be taken as a matter of deliberate

1 See review in C.R. lxi. 1, p. 17 f.

select tuitio may : The c intrin chara Tà ève or of is a r where elvai e tende and o de vo clearl in the distin and / expre

similatine as continue of carry
In

μέθεξ

positi

tality

αὐτὸ ι

ence,

T

in its refuse repea are u Imme — wit over to of spa serve oixero particular use o — 131

παραδ

with

αν με

found

4599

selection of the appropriate, of intellectual choice rather than any imaginative intuition. If this be granted, then the very frequency of his metaphorical expressions may reasonably be connected with and used as a key to something in his thought. The conception of analogy, in its two aspects of similarity and proportion, is indeed intrinsic to a central doctrine, the Theory of Forms in its more frequent and more characteristic expression. As between the τόπος όρατός and the τόπος νοητός, between $\tau \dot{a}$ $\dot{\epsilon} \nu \theta \dot{a} \delta \epsilon$ and $\tau \dot{a}$ $\dot{\epsilon} \kappa \epsilon \hat{i}$, the relationship may be expressed in terms of positive likeness or of negative inferiority; in either case it rests on this notion of analogy. παράδειγμα is a metaphor in origin, so is μίμησις, as well as the stronger phrase (Phaedo 75 a) where particulars ὀρέγεται . . . είναι οίον τὸ ἴσον, or below (76 b) προθυμεῖται . . . τοιαῦτ' elvaι olov ἐκεῖνο, which as Burnet remarks is 'a still more picturesque way of expressing tendency'. (Dr. Louis, op. cit., does not appear to include μίμησις as a metaphor, and on the passages just mentioned he writes, by a slip, that 'les Idées sont douées de volonté et de sentiments'.) This relationship between particular and Form appears clearly in the earlier presentations of the theory—in *Phaedrus* (placing that dialogue in the middle group), in Phaedo (75 a ff.), and Republic, and is again explicit and distinct in the final scheme of the Timaeus where (e.g. 48 e ff.) again παράδειγμα and μίμησιs stand out among other metaphors as the basic and characteristic

The metaphor of proportion superadds the concept of a scale of value to that of similarity, and thus serves its didactic purpose. It is central in the *Republic*, both in the analogous divisions of $\pi\delta\lambda\iota_S$ and $\psi\nu\chi\dot{\eta}$ and in the parables of books 6–7, becoming continuous proportion when the Cave figure and the Sun figure are combined. The use of such continuous proportion (ostensibly for mere illustration, but there again

carrying a lesson) at Phaedo 109 a ff. has already been mentioned.

In contrast to Plato's clear and repeated figures of language with reference to the παράδειγμα and μίμησις relationship of particular and Form, his expressions about the μέθεξις or παρουσία aspect of the theory seem to be scanty and indefinite. The exposition of the doctrine in Phaedo 100 dff., at the outset of the final proof of immortality based on its application, begins with a touch of εἰρωνεία—ὅτι οὐκ ἄλλο τι ποιεῖ αὐτὸ καλὸν ἢ ἡ ἐκείνου τοῦ καλοῦ εἴτε παρουσία εἴτε κοινωνία εἴτε ὅπη δὴ καὶ ὅπως. 'Presence, or communion, or—how you like.' ὅπη δὴ καὶ ὅπως is a colloquialism complete in itself, and no participle need be inserted to fill out sense or construction. Socrates refuses to specify, at this point, the precise nature of the relationship; he merely repeats that τῷ καλῷ τὰ καλὰ γίγνεται καλά. At 101 c the terms μετέχειν and μετάσχεσις are used; at 102 b Phaedo, recapitulating the argument, brings in μεταλαμβάνειν. Immediately after this the use of εν begins—λέγεις τότ' είναι εν τῷ Σιμμία ἀμφότερα κτλ. -with (102 d) the distinction between αὐτὸ τὸ μέγεθος and τὸ ἐν ἡμῖν μέγεθος. So 103 b, οὔτε τὸ ἐν ἡμῶν οὔτε τὸ ἐν τῇ φύσει. In the ensuing argument the verbs used are those of spatial relationship—προσελθεῖν, δέχεσθαι, ἐπιφέρειν, ὑπομένειν, ἀπιέναι. This language serves well to point the application to soul—106 e, τὸ δ' ἀθάνατον σῶν καὶ ἀδιάφθορον οἴχεται ἀπιόν, ὑπεκχωρῆσαν τῷ θανάτω—but if understood literally, of the Form 'in' the particular, it inevitably calls for the criticism expressed in Parmenides 130 e ff. There the same words appear again—μεταλαμβάνειν, μετάληψις, μετέχειν (131 c), and also the use of έν. The theory is criticized on the interpretation of μεταλαμβάνειν as 'sharing' -- 131 a οὐκοῦν ἤτοι ὅλου τοῦ εἴδους ἢ μέρους ἔκαστον τὸ μεταλαμβάνον μεταλαμβάνει; So with μετέχειν—131 C μεριστά ἄρα . . . ἔστιν αὐτά τὰ εἴδη, καὶ τὰ μετέχοντα αὐτῶν μέρους αν μετέχοι. It is on this quantitative and spatial application that the doctrine is found untenable. Finally, Socrates surrenders the whole position so far as a distinctive aspect of the relationship goes—132 d ἔμοιγε καταφαίνεται . . . τὰ μὲν εἴδη ταῦτα ὥσπερ παραδείγματα έστάναι ἐν τῆ φύσει, τὰ δὲ ἄλλα τούτοις ἐοικέναι καὶ εἶναι ὁμοιώματα, καὶ ἡ ¹ Cf. C.Q. xl. 3-4, July-October 1946, p. 110 f.

sible that

al belief.

ading the

astration,

and the

ed. Had

d to the

tation to

not bring

light or

referring

eff.) all

age there

or a quiet

re to the

chosis in

or merely

sted that

at he did

different

ose, but

seriously

d to Dr.

akes an

m which

aggested

clearer,

gth and

etaphors

ort clear

is latter

t of sun

owledge

of ascent

acation;

ness (for

gures of necdote

ctors in

pon the

ns. But

ohorical

actual

n words

d-play,

essions;

rimina-

liberate

μέθεξις αυτη τοις άλλοις γίγνεσθαι των είδων ουκ άλλη τις η είκασθηναι αυτοίς. The

παράδειγμα theory has prevailed.

Plato's other references to the $\mu \ell \theta \epsilon \xi \iota s$ theory are few, and give no further light on its meaning. At Republic 476 c-d the two figures of δμοιότης and μέθεξις are used in successive sentences, the latter being in no way explained. At Symposium 211 b our hopes are raised only to be disappointed—τὰ δὲ ἄλλα πάντα καλὰ ἐκείνου μετέχοντα τρόπον τινά τοιοῦτον, οἷον γιγνομένων τε τῶν ἄλλων καὶ ἀπολλυμένων μηδὲν ἐκεῖνο μήτε τι πλέον μήτε έλαττον γίγνεσθαι μηδέ πάσχειν μηδέν. 'In some such way that . . .'—the introductory phrase is vague, and it leads on merely to the familiar contrast between changing particulars and changeless Form. Of μετέχεω itself there is no elucidation at all. This passage is parallel in vagueness to the εἶτε παρουσία εἶτε κοινωνία εἶτε ὅπη δὴ καὶ ὅπως of Phaedo 100 d. and here there is no suspicion of εἰρωνεία. Apart from the crudely spatial presentation, enlarged upon in the Phaedo for the proof of immortality and discredited in the Parmenides, Plato's language about μέθεξις is evasive and tentative throughout; when compared with the terms, varied but clear and consistent, which he uses for the παράδειγμα relation, it goes to show that while the latter conception was itself clear and definite in his thought from first to last, 'participation' never became more than an experimental attempt to fit the Socratic quality, èv ήμῖν, into the role of the transcendent Form. The solution comes only in the Timaeus, and in terms of the παράδειγμα—50 C εἰσιόντα καὶ ἐξιόντα τῶν ὅντων ἀεὶ μιμήματα. As to the independent existence of the orra, Plato's language is here again a clue to the established certainty of his thought, in his recurrent use of οὐσία, ὄντως ὄν, and so forth. Thus Phaedrus 247 e, τὸ ὁ ἔστιν ὂν ὄντως, and the remarkable phrase at 247 c, ή ἀχρώματός τε καὶ ἀσχημάτιστος καὶ ἀναφής οὐσία, ὄντως οὖσα.

Flato's language is immensely varied, and at no stage does he develop a consistent vocabulary; he does not, like Aristotle, make definitions and use terms accordingly. Even where, as in the παράδειγμα theory, his thought appears to be clear to himself, the very variety of his imaginative metaphors makes his system hard to reduce to terms of modern philosophy. It becomes necessary for his exponents in every age to accept his message as infinitely suggestive and to interpret it as best they may. His speech, εὐπλαστότερον κηροῦ, remains that of his own time and his own genius.

DOROTHY TARRANT.

BEDFORD COLLEGE, LONDON.

IT is which the solve thes

of a negatis its It is only these

(3
In
μή if
take
leadir
ἄρασθ
προσή
It

the n

(2

It is a has, or in this betwee individual the and the mining

quently

would
'wegen of wird, we syntax as norm in which may ass Greeque, obligated logically

2 The

I have

ON NEGATIVING GREEK PARTICIPLES, WHERE THE LEADING VERBS ARE OF A TYPE TO REQUIRE μή

It is one of the attractions of Greek syntax that it provides an abundance of usages which require careful discrimination, if we are to appreciate their value; and which at the same time present problems of interpretation which have not been completely solved. This is particularly the case with the use of the negatives, and it is one of these constructions with which we are concerned here.

The type of sentence under examination is one in which (a) there is a participle of any sort (attributive, circumstantial, or supplementary) which needs to be negatived, and (b) the leading verb, on which the participle immediately depends, is itself either negatived by $\mu\eta$, or is positive but would require $\mu\eta$ if it were negative. It is immaterial whether the sentence is principal or subordinate. There are excluded only the participles which are conditional, or are in a sentence with generic meaning: these always require $\mu\eta$.

As examples we may quote:

- (1) Aesch. Ag. 906-7 ἔκβαιν' ἀπήνης τῆσδε, μὴ χαμαὶ τιθεὶς τὸν σὸν πόδ' . . .
- (2) Soph. Tr. 410-11 ποίαν ἀξιοῖς δοῦναι δίκην, ην εὐρεθῆς ἐς τήνδε μὴ δίκαιος ἄν;
- (3) Thuc. 6. 9. 1 ἄμεινόν ἐστιν . . . μή . . . πόλεμον οὐ προσήκοντα ἄρασθαι.

In example (1) the leading verb ἔκβαινε is imperative, and would therefore take $\mu\dot{\eta}$ if it needed a negative: the participle $\tau\iota\theta\epsilon\dot{\iota}s$ has $\mu\dot{\eta}$. In example (2) $\epsilon\dot{\nu}\rho\epsilon\theta\hat{\eta}s$ would take $\mu\dot{\eta}$, being in a conditional clause: the participle $\check{\omega}\nu$ has $\mu\dot{\eta}$. In example (3) the leading verb on which the participle most closely depends is the subjective infinitive $\check{a}\rho a\sigma\theta a\iota$ (and not, of course, $\check{\epsilon}\sigma\tau\iota\nu$), which is negatived by $\mu\dot{\eta}$: here the participle $\pi\rho\sigma\sigma\dot{\eta}\kappa\sigma\nu\tau a$ has $o\dot{\upsilon}$.

It is the general belief that the participle in this situation as a normal rule takes the negative $\mu\eta$, and that it does this automatically, without regard to its sense. It is argued that there is here the force of attraction; that because the leading verb has, or would have, $\mu\eta$, the participle does likewise. I have found something repugnant in this notion, which so completely disregards the usual delicate distinction drawn between $\mu\eta$ and ov in early and classical Greek and based upon the sense of the individual uses. I have accordingly re-examined all the passages involved, so far as they are known to me,² and have concluded that the prevailing belief is wrong, and that it is the sense of each participial phrase which is the decisive factor in determining whether $\mu\eta$ or ov is used. There is, in fact, no difference between the negatives

I Kühner-Gerth, ii. 200, says that μή is frequently found with such participles, where οὐ would otherwise be the negative required: 'wegen der Konstruktion des Satzes μή gebraucht wird, wo an sich οὐ stehen müsste'. Thompson, Syntax of Attic Greek, 412, takes the use of μή as normal, though allowing two classes of case in which οὐ is used, where 'the Participial clause may assert its independence'. Humbert, Syntaxe Greeque, 366-7, says that μή is general, but not obligatory: one also finds the οὖ which would logically be expected.

² That is, those in authors down to 400 B.C. I have relied almost entirely on the valuable

collection of such passages contained in the article by G. E. Howes, 'The Use of μ_N^* with the Participle, where the negative is influenced by the construction upon which the participle depends', Harvard Studies in Classical Philology, xii, 1901, 277-85. References to Howes hereafter will be to this article. Howes's standpoint, which I do not share, may be seen in his title, being that now generally accepted. It is unfortunately a defect of the article that he arranges the passages only according to the nature of the construction on which the participle depends, and not according to their authors and periods. It is therefore not historical in its treatment.

is. The

light on used in ri b our ετέχοντα μήτε τι .'-the between ation at ε όπη δή rom the ortality ive and nsistent, ter concipation' ality, èv imaeus,

onsistent ordingly. himself, educe to very age ey may. nius.

RANT.

ιμήματα.

a clue to

, and so

of the participles in the special situation under discussion, and those of participles elsewhere.

My explanation, then, is this. Where there is predication of the participle, the negative is $\mu \dot{\eta}$: this is what we should expect, because the participle could be expanded into a correlative leading verb, and the leading verb is *ex hypothesi* of a type to take $\mu \dot{\eta}$. Where there is not predication of the participle, the negative is $o\dot{v}$: the participle stands in an adjectival relation, and takes the same negative as an adjective would.

We must now see how well, or how badly, this theory fits the facts. Examples will fall into one of four classes:

I (a), μή with predicative participle;

(b), μή with non-predicative participle;

2 (a), où with predicative participle;

2 (b), où with non-predicative participle.

If the supposed rule were completely binding and there were no exceptions to it, we should have examples only under 1 (a) and 2 (b). But in fact that is not the case.

(i) Poets, excluding drama. 16 examples.

I (a), 14 examples. Hom. Od. 4. 684; Hes. Op. 444, 489, 696; Tyrt. 8. 14; 13. 5; Theog. 280, 332, 364, 734, 764, 913, 1154; Pind. Nem. 8. 4.

Generally examples are straightforward, and need no comment. But a few have special interest.

Hom. Od. 4. 684-5 μὴ μνηστεύσαντες μηδ' ἄλλοθ' δμιλήσαντες ὅστατα καὶ πύματα νῦν ἐνθάδε δειπνήσειαν.

Probably both $\mu\nu\eta\sigma\tau\epsilon\dot{\nu}\sigma a\nu\tau\epsilon_s$ and $\delta\mu\lambda\dot{\eta}\sigma a\nu\tau\epsilon_s$ are predicative (in spite of Monro, Homeric Grammar, 327, who takes $\mu\nu\eta\sigma\tau\epsilon\dot{\nu}\sigma a\nu\tau\epsilon_s$ as positive and parenthetic): 'would that they had not wooed, nor ever come together, and may they now feast, etc.' (so Merry and Riddell). We cannot suppose that the participles stand for a orist optatives: thus $\mu\dot{\eta}$ $\mu\nu\eta\sigma\tau\epsilon\dot{\nu}\sigma a\iota\epsilon\nu$ could not have meant 'would that they had not wooed' in any period of Greek. Nor could they have stood for a orist indicatives: in Homer the past tenses of the indicative were not used to express a wish (apart from the verb $\ddot{\omega}\phi\epsilon\lambda o\nu$). The sense must be 'may they feast, not being (I would this were so) in the position of having wooed or ever come together'. This is the interpretation embodied in Eustathius' $\mu\dot{\eta}$ $\mu\nu\eta\sigma\tau\epsilon\dot{\nu}\sigma a\nu\tau\epsilon_s$ $\epsilon l\epsilon\nu$. The participles are attributive, and the time referred to by them is absolute past. Since the participial phrase embodies a wish and is predicative, it is negatived by $\mu\dot{\eta}$.

I (b), I. Hes. Op. 591 καὶ βοὸς ύλοφάγοιο κρέας μή πω τετοκυίης.

ing a

T

δοτις δίκαιο it will in the betwee partic circula saying two for the ot passag I the lévar, si

binati where And. κτενῶ pected of my

(ii) Ae

1 (

necess

I h
λότας
μηδ' å
have t
the ad
a who
senten
of a p

1 (c) 2 (c) 2 (c)

senten

i.e. '. .

Η α ενδροσι 610 (v. both e former σώζου φθείρα

The participle is almost certainly to be taken as attributive, and not as representing a wish in itself.

2 (a), o.

2 (b), 1. Theog. 749-51 όππότ' ἀνηρ ἄδικος καὶ ἀτάσθαλος, οὕτε τευ ἀνδρὸς ούτε τευ άθανάτων μηνιν άλευόμενος, ύβρίζη . . .

I take ἀλευόμενος as non-predicative. But note that in vv. 744-6 we have έργων οστις ανήρ εκτός εων αδίκων, | μή τιν' ύπερβασίην κατέχων μηδ' ορκον αλιτρόν, | αλλά δίκαιος ἐὼν μὴ τὰ δίκαια πάθη. Is κατέχων predicative or not? If my rule is applied, it will be taken as predicative: and that would explain why $\mu\eta$ is used here, and ov in the later passage. It is plain that it is occasionally very hard to distinguish between the presence and absence of predication, when dealing with circumstantial participles. Passages of this kind open the way for the charge that the argument is circular; that I use the presence of $\mu \dot{\eta}$ to prove that a participle is predicative, while saying that it is because it is predicative that it takes $\mu\eta$. To this the answer is twofold: first, that such doubtful passages are comparatively rare, and secondly, that the other explanations of the use of $\mu\eta$ and or leave unexplained a larger number of passages, as I shall show.

I think that it is unwise to include Theog. 468 μηδὲ θύραζε κέλευ' οὐκ ἐθέλοντ' léval, and id. 1094 χαλεπον δ' οὐκ ἐθέλοντα φιλεῖν, since cases of this sort do not necessarily support my theory. Here οὐκ with ἐθέλων forms a strong negative combination, equivalent in meaning to a positive; and in such phrases où is often preserved where, apart from the combination, μή would be used. So Howes compares Eur. And. 382-3 ην θάνης σύ, παις οδ' ἐκφεύγει μόρον, | σοῦ δ' οὐ θελούσης κατθανείν, τόνδε κτενῶ, where οὐ is retained in a conditional protasis. I shall draw attention to suspected cases of negative combination, but shall not rely on them as evidence in support

of my theory.

(ii) Aeschylus. 7. 1 (a), 5. Ag. 786, 906; Eum. 301; Sept. 3; Suppl. 409.

I have not included the very difficult Suppl. 210 & Zeû, κόπων οικτιρε μάπολωλότας. I suggest that we can understand it by comparing Od. 4. 684 μη μνηστεύσαντες μηδ' ἄλλοθ' όμιλήσαντες, which was discussed above. There μνηστεύσαντες was seen to have the meaning 'not being (I would this were so) in the position of having wooed': the addition of '(I would this were so)' was justified by the fact that the sentence as a whole is a wish, and that that mood colours the participles too. At Suppl. 210 the sentence is a command: but it is a command addressed to a god, and is the equivalent of a prayer. The participle ἀπολωλόταs also embodies a prayer. The meaning of the sentence is 'O Zeus, pity us for our suffering, not being, I pray, consigned to perdition'; i.e. '... and let us not be consigned to perdition'.

I (b), o.

2 (a), o.

2 (b), 2. Ag. 610; Sept. 712.

Howes thinks that οὐκ ἐπισκοπουμένην in Ag. 13 (vv. 12-13 εὖτ' αν δὲ νυκτίπλαγκτον ένδροσόν τ' έχω | εὐνην ὀνείροις οὐκ ἐπισκοπουμένην), and οὐδὲν διαφθείρασαν ibid. 610 (vv. 609-10 (γυναΐκα) . . . σημαντήριον | οὐδὲν διαφθείρασαν ἐν μήκει χρόνου), are both examples of negative combination, and owe the retention of ov to that fact: the former, he says, suggests the simple idea 'unvisited', and the latter is equivalent to σώζουσαν. Thompson, Syntax of Attic Greek, 412, agrees with him as to οὐδέν διαφθείρασαν. This is almost certainly right for οὐκ ἐπισκοπουμένην (cf. Eur. Bacch. 1050

is to it, e case.

rticiples

bout the

turned

entence.

alent of

present le more

sense is

iate the

instead

rould be

d be no

μή. In

purely

igly où,

ple, the

panded

to take

rticiple

ples will

vould.

ντα.

; 13. 5; w have

Monro, 'would st, etc.' aorist ad not ves: in rt from

vere so)

etation

ve, and

abodies

(v) A

I

1

2

T

(vi) I

διάνοι

Alexa

them

but to

the b

but ra

attac

I

2

F

of the

(vii)

I

2

2

In

VOVT

not sa

and t

of the

Sumn

I w

2 &

1. 11 (

τια negative combination. Indeed, we find, by the side of the combinations, negative compounds in which the negative is merged into a single form with the word that it negatives: so ἀτδηλος, ἀιδής beside οὐχ ὁρώμενος; ἀέκων beside οὐχ ἐκών, οὐκ ἐθέλων (Soph. O.C. 935; Theog. 468 and 1094); ἄνομος beside οὐ νομιζόμενος (Hdt. 1. 11. 3). The compounds are older, but less emphatic: the separate statement of the negative in the combination underlines its importance anew. It often provides a convenient refuge, to explain a difficult οὐ by the label 'negative combination'. But we must beware of having recourse to it too often.

This mistake has been made in dealing with Sept. 712 $\pi\iota\theta\circ\hat{v}$ yuvaifi, $\kappa ai\pi\epsilon\rho$ où $\sigma\tau\epsilon\rho\gamma\omega\nu$ $\delta\mu\omega s$. So Tucker, in his edition, explains that 'où, going closely with $\sigma\tau\epsilon\rho\gamma\omega\nu$, is not affected by the imperative'. Howes wisely does not wish to use this argument: he thinks that 'the influence of $\kappa ai\pi\epsilon\rho$ (suggesting a fact) upon the negative is evidently stronger than that of the imperative'. But rather it is enough to see that où $\sigma\tau\epsilon\rho\gamma\omega\nu$ is not predicative, but purely descriptive. The meaning is 'You (Eteocles), who do not love women, do you none the less trust them'. It is not 'do you trust them, though none the less do not love them'; which would have been the meaning if we had had $\mu\eta$.

(iii) Sophocles. 11.

- 1 (a), 6. Ant. 1061; O.C. 489, 1279, 1509; O.T. 1389; Tr. 411.
- 1 (b), 3. Aj. 1007; El. 1014; O.T. 1110.1
- 2 (a), o.
- 2 (b), 2. Ant. 1325; O.T. 885.2

(iv) Euripides. 40.

- 1 (a), 22. Alc. 536; Hec. 874; Heracl. 175; H.F. 203, 505, 1110; Ion 632; I.A. 818; I.T. 535; Med. 239; Or. 657, 1174, 1198, 1580; Phoen. 1234; Suppl. 254; Tro. 874, 1166; Fit. 202, 286. 4, 779. 1, 1049.
- 1 (b), 5. And. 845; Heracl. 533; I.T. 1288; Med. 815; Tro. 728.

In And. 845 ἀλλ' εἴ σ' ἀφείην μὴ φρονοῦσαν, ὡς θάνης, the participle could have predicative sense: 'if you were out of your senses, and I should let you go in that state'. But the context supports the contrary view, that the sense is 'if I should let you go, being, as you are, out of your senses'. In I.T. 1288 μὴ κελευσθεῖσαν may be generic, as also μὴ πάσχουσαν in Med. 815.

- 2 (a), o. The participle in Bacch. 1050 ώς ὁρῷμεν οὐχ ὁρώμενοι is best taken as being in a negative combination.
- 2 (b), 13. Alc. 1096; El. 46, 952; Hec. 517, 961; Heracl. 773, 897; Ion 272, 1324; I.T. 802, 1344; Suppl. 472; Fr. 578. 4.3

Sophocles just quoted: 'teach me, as I do not know' passing into 'teach me, as I am one of those who do not know'; and 'think of him as no longer living' into 'think of him as of one of the dead'. I shall indicate in foot-notes the existence of passages with ω_s . There are, in all, nine cases of $\mu\eta$ after ω_s , and eight of ω_s .

- ² οὐ in negative combination O.C. 935 (οὐχ ἐκών).
- 3 ώs with μή Alc. 1094; Heracl. 693: with οὐ Med. 1311; Rhes. 145. οὐ in negative combination And. 894 (οὐκ εὖ); Phoen. 1319 (οὐκέτ' ὄντα); Fr. 450 (οὐκέτ' οὖου).

coav. The essence of binations, the word έκών, οὖκ vos (Hdt. ent of the rovides a

saίπερ οὐ sely with o use this negative o see that Eteocles), you trust meaning

bination'.

A. 818; Tro. 874,

in that nould let may be

aken as

I do not m one of of him as as of one notes the re, in all, où.

935 (oùx

with où abination o' o'rra);

(v) Aristophanes. 13.

1 (a), 11. Eccl. 284; Eq. 766; Lys. 474; Nub. 268, 619, 966; Pl. 494, 552, 803, 892; Vesp. 1119.

1 (b), o.

2 (a), o.

2 (b), 2. Ach. 681; Nub. 1123.1

(vi) Herodotus. 20.

I (a), 9. 1. 80 med.; 5. 18 fin.; 6. 130; 7. 24; 7. 50; 7. 132; 7. 139; 9. 41 med.; 9. 45 fin. Thus I construe with a predicative participle 9. 45 fin. ἐθέλων ὑμῖν δηλῶσαι τὴν διάνοιαν τὴν Μαρδονίου, ἵνα μὴ ἐπιπέσωσι ὑμῖν οἱ βάρβαροι μὴ προσδεκομένοισί κω. Alexander had revealed to the Athenian generals the intention of Mardonius to attack them. It was not his wish to prevent the attack—which he could hardly have done—but to see that the Greeks had foreknowledge of it. The meaning is therefore not 'that the barbarians may not attack you, being, as you are, in a state of non-expectancy'; but rather 'that you may not be in a state of non-expectancy and the barbarians so attack you'. The main emphasis of the sentence lies on its participial close.

1 (b), 1. 7. 10. δ.

2 (a), o.

2 (b), 10. 1. 91 med.; 1. 99; 3. 14 med.; 6. 103; 6. 106; 6. 117; 7. 10. η med.; 7. 49; 8. 52; 9. 116 med.

For five of these (1. 99; 6. 103; 6. 106; 6. 117; 7. 10. η med.) Howes falls back (admittedly with hesitation) on the supposition that the use of ϑ emphasizes the fact of the action described by the participle, but there seems to be no good ground for attributing special emphasis to these cases.²

(vii) Thucydides. 24.

1 (a), 14. 1. 82. 1; 1. 90. 3; 1. 124. 2; 2. 2. 3; 2. 87. 8; 3. 40. 7; 3. 48. 1; 3. 59. 1; 4. 38. 3; 4. 118. 4 ter; 8. 14. 1; 8. 74. 3.

1 (b), 5. 3. 59. 1; 4. 67. 3; 6. 36. 4; 6. 70. 1; 8. 68. 4.

2 (a), o

2 (b), 5. 1. 10. 4 fin.; 4. 111. 2; 5. 49. 1; 8. 45. 2 fin.; 8. 50. 3.

In 5. 49. I We have Aakedayloviol $\tau o \hat{v}$ depo \hat{v} etactor work which because they refused to pay the fine'. Here od follows the consecutive $\mu \dot{\eta}$, and the distinction clearly marks the non-predicative nature of od: their non-payment of the fine was not a result of the exclusion, as was the failure to make sacrifice.³

Summary

wer y					
(i)	Poets, excluding drama				
	I (a)	14.	2 (a)	0	
	1 (b)	I.	2 (b)	1	
	Aeschylus				
	I (a)	5-	2 (a)	0	
	1 (b)	0.	2 (b)	2	
(iii)	Sophe	cles			
	1 (a)	6.	2 (a)	0	
	I (b)	3.	2 (b)	2	
(iv)	Euripides				
	1 (a)	22.	2 (a)	0	
	1 (b)	5.	2 (b)	13	

1 ώς with μή Ran. 128.

² ώs with οὐ 9. 122: οὐ in negative combination
 I. II (οὐ νομιζόμενα).

3 ώs with μή 1. 120. 2 fin.; 7. 15. 1 bis; 7. 77. 7:

(v) Aristophanes

I (a) II. 2 (a) 0 I (b) 0. 2 (b) 2

(vi) Herodotus
1 (a) 9. 2 (a)

1 (b) 1. 2 (b) 10

(vii) Thucydides 1 (a) 14. 2 (a)

1 (b) 5. 2 (b) 5

Totals

1 (a) 81. 2 (a) 0 1 (b) 15. 2 (b) 35

ώs with οὐ 3. 4. 4; 3. 37. 4; 7. 31. 4; 8. 63. 4. οὐ in negative combination 4. 22. 3 (οὐ τυχόντες); 6. 9. 1 (οὐ προσήκοντα); 8. 104. 4 (οὐχ ἐκάς).

The results which are of the most interest are those under r(b) and r(b) and r(b). It will be remembered that, on a strict interpretation of my rule of predication, we should expect to find no examples under either heading. This is indeed exactly what does happen under r(b) there are no predicative uses of r(b). But under r(b) we have found as many as r(b) examples of non-predicative r(b). What shall we say to this?

My answer is that we are here witnessing the spread of $\mu\dot{\eta}$ from its original field of use, where it was restricted to cases of predication: it is an example of linguistic contamination. It must be noted that as many as 13 of the 15 cases of $\mu\dot{\eta}$ under 1 (b) occur in Sophocles, Euripides, and Thucydides, all writing at the close of the period which we have under review. There is none in Homer. It is well known that in later Greek $\mu\dot{\eta}$ became the negative usually found with participles, without regard to their individual meanings, and some signs of this appear already in the classical language. The cases of $\mu\dot{\eta}$ under 1 (b) should be regarded as another of these signs, very possibly the earliest. And doubtless the contamination was the more likely to occur with the participles which we have been discussing, because $\mu\dot{\eta}$ was the negative of the leading verbs. That much concession I am ready to make to the theory of attraction, which has been exalted into being the general explanation of $\mu\dot{\eta}$ with all such participles.

What, it may be asked, are the advantages of my form of explanation? They are, I think, twofold. First, that it preserves the distinction between $\mu\dot{\eta}$ and $o\dot{v}$ in early and classical Greek, based on the meaning of the words negatived. To that I referred at the start. Secondly, it attributes 'regularity' to more of the cases. On the supposition of Howes, that $\mu\dot{\eta}$ is the regular negative of the participle in all cases where the leading verb has $\mu\dot{\eta}$, we have this result: $^2\mu\dot{\eta}$ with participle (regular) 134, $o\dot{v}$ with participle (irregular) 59. This does not make a proper comparison with my figures, since it includes cases with negative combination and also those with $\dot{\omega}_{S}$, which I omitted: if we leave those out, Howes's result is $\mu\dot{\eta}$ with participle (regular) 124, $o\dot{v}$ with participle (irregular) 31. With this compare my explanation, which regards as regular all but 15 cases of $\mu\dot{\eta}$.

A. C. MOORHOUSE.

University College, Swansea.

'Encroachments of $\mu\eta$ on $o\bar{v}$ in Later Greek', A.J.P. i. 45–57. It is interesting that Gildersleeve remarks (p. 54) that 'of classic authors Sophocies is especially free in using $\mu\eta$ with the relative': to which we might add that he is also unusually free in the use of $\mu\eta$ in place of $o\bar{v}$ in the non-predicative phrases here examined. Cf. too the remark of Humbert, Syntaxe Grecque, 363, on the freedom of use of the negative particles by Sophocles.

² His gross total is more than mine, because he includes Antiphon and Andocides (9 examples), and chiefly because he reckons a number which I do not accept as proper examples of the construction

3 The 'irregular' cases of οὐ, according to the prevailing view, are taken as examples of especially emphatic and clear statement. Thus Howes, and Thompson, Syntax of Attic Greek, 412, on Eur. Hec. 517 εἰπέ, καίπερ οὐ λέξων φίλα; and Kühner-Gerth, ii. 200, on Thuc. 4. III. 2... τινὰς περιαγαγόντες ἐσεκόμισαν, ὅπως τοὺς ἐν τῷ πόλει οὐδὲν εἰδότας ἐξαπίνης φοβήσειαν. But I cannot find much cogency in this argument, which has the appearance of invention faute de mieux.

THE comanus

'Iμβρα

voσούν

source

conste

It is no

of it—

here.

It

standi

doctri

of lite doctri than (saec. the forw, a Cumor when title a the se older title be to be

of the of Epl Can we can.

De which

which
καὶ θά
ἀμβρή
τῆς κα
of our

edition
by Miss
² Cf.
Kroll,
d'Herm
³ Cf.
Kroll,

by He

THE AUTHOR OF PS.-GALEN'S PROGNESTICA DE DECUBITU

The codex Cromwellianus 12 (saec. xv-xvI), one of the most interesting astrological manuscripts of the Bodleian Library in Oxford, contains on p. 450 f., under the heading 'Ιμβρασίου 'Εφεσίου περὶ ἀρρώστων, the first part of Ps.-Galen's περὶ κατακλίσεων νοσούντων, which is, together with a work of Hermes Trismegistos, our principal source for iatromathematics, that is, for diagnosis and prognosis based on certain constellations, above all on the Moon's position in a particular sign of the zodiac. It is not the text itself that calls for notice—since we possess older and better manuscripts of it—but the mention of the author, Imbrasios of Ephesus, which only occurs here.

It is agreed that this astrological text is unworthy of a medical writer of Galen's standing,3 although neither he nor his colleagues were always free from astrological doctrines.4 And we could easily discount the ancient evidence because this type of literature liked to assume a famous name in order to get a better reception for its doctrines. Cumont has shown, however, that the link with Galen is even weaker than that of an apocryphal writing.⁵ Inspecting the codex Laurentianus 28, 34 (saec. x-xi), the source of all other manuscripts (except the Cromwellianus), he found the following heading, f. 5: Περὶ χειρουργησιῶν:—Γαλινοῦ καὶ περὶ κατακλίσεως νοσούν- $\tau\omega\nu$, and that our text is accordingly preceded by a short treatise of Galen on surgery. Cumont argued that the archetype ascribed only the first text to Galen, and that when the scribe of the Laurentianus, by some inadvertence, continued, without a new title and without any interruption, with the text of de decubitu, he supplemented the second title in the headline. Most of the other manuscripts (none of which is older than the fourteenth century) omitted the text on surgery together with its title but kept Galen with the remainder of the headline. Thus the authorship came to be ascribed to Galen, and this slipped into our printed texts.

Cumont's argument is, I think, conclusive in itself. Nevertheless, the testimony of the Cromwellianus is welcome. Here there is no mention of Galen but of Imbrasios of Ephesus. Galen is then eliminated definitely; but what is gained by the new name? Can we say more about the author than that his is a possible name? I think we can.

Describing the Egyptian hieroglyphs, Horapollo comes at 1. 38 to the symbol which means among other things the priest: $i\epsilon\rhoογραμματέα$ δὲ (δηλοῦσιν), ἐπειδή ζωήν καὶ θάνατον οὖτος διακρίνει. ἔστι δὲ παρὰ τοῖς ἱερογραμματεῦσι καὶ βίβλος ἱερά, καλουμένη ἀμβρής, δι' ἢς κρίνουσι τὸν κατακλιθέντα ἄρρωστον, πότερον ζώσιμός ἐστιν ἢ οὔ, τοῦτο ἐκ τῆς κατακλίσεως τοῦ ἀρρώστου σημειούμενοι. Horapollo's words well suit the contents of our iatromathematical work, better than the speculations with numbers and names

¹ Ed. Kühn, Scr. med. Gr. xix. 529-73; a new edition for the Corp. Med. Gr. is being prepared by Miss E. Boer.

 i). It will we should what does

we have

linguistic

μή under

se of the

own that

ut regard

classical

ese signs,

likely to

negative

heory of

with all

hey are,

in early

referred

supposi-

here the

ov with

figures,

which I

124, où

gards as

OUSE.

the con-

ng to the nples of it. Thus

ic Greek.

ων φίλα;

II. 2 . . .

थेड हेर मन्ने

But I gument,

faute de

this?

- ² Cf. Bouché-Leclercq, Astrol. gr. 517 ff.; Kroll, RE. ix. 802 ff.; Festugière, La révélation d'Hermès Trismégiste, i (1944), 123 ff.
- ³ Cf. Heeg, Sitz. Ber. Berlin, 1911, 993 f.; Kroll, l.c.; Cumont (see note 5), 119.
- ⁴ The relevant passages in Galen are collected by Heeg, l.c., 1003; cf. Wellmann, *Hermes*, xlviii, 1913, 467.
- ⁵ Cumont, 'Les "Prognostica de decubitu" attribués à Galen', Bull. de l'Inst. hist. belge de Rome, xv, 1935, 119 ff.
- ⁶ They are listed by Diels, Handschr. d. gr. Ärzte, Abh. Akad. Berlin, 1905, 112, 135; 1907, 36; cf. Cumont, l.c., 121-2.
- ⁷ Cf. Pape, Wörterb. d. gr. Eigennamen, s.v.; in the RE. no man of this name appears but an Imbrasia, epithet of Hera and Artemis, a river (and river-god) in Samos and three mythical persons Imbrasos and an Imbrasides.

quoted in the commentaries of Leemans and Sbordone: the sacred book consisted of forecasts whether or not a patient would survive, the point of departure being the time when the patient was taken ill. But as this book was called ἀμβρής and the author of ours is Imbrasios, I would even suggest that Horapollo alludes to our text. Now, is it the title which was developed into the name of an author, or vice versa? A Biblical passage quoted by Leemans and Sbordone decides the case in favour of the author.¹ St. Paul (2 Tim. iii. 8) compares those who would not accept the truth with the magicians Iannes and Iambres who, at the court of the Pharaoh, tried to equal Moses and Aaron by performing the same miracles, and failed.² The curious point of this passage, noted already by Origen,³ is that Exodus vii. 7, to which St. Paul alludes, does not give the names, so that St. Paul must have taken them from some apocryphal Jewish writings. They were obviously of great fame in the indigenous Egyptian tradition and worthy of being identified with the adversaries of Moses and

Iannes and Iambres were priests and magicians first, and then legendary writers like Hermes Trismegistos or Nechepso and Petosiris. Pliny mentions Iannes only in his list of great magicians (and so does Apuleius), but their source spoke, no doubt, of the two.4 Most of our evidence belongs to the Biblical tradition.5 It is perhaps an accident that they do not occur in the extant fragments of Artapanos (c. 100 B.C.) who, in his work περὶ 'Ιουδαίων,6 had much to tell about the miracles of Moses. Numenius mentioned them in his book περὶ Μωϋσέως⁷ and so, therefore, did his Jewish source whoever it was. Barhebraeus, the Syriac writer of the thirteenth century A.D., tells us that they were the teachers of Moses, 'as Artamonis showeth in his epistle' (or Aristamunisos, as he calls him in another work). The names are corrupt, and I cannot correct them; the detail depends on Acts vii. 22, where St. Stephen says that 'Moses was learned in all the wisdom of Egypt', and these words may depend on another piece of the Jewish tradition. We further hear that they regretted their opposition to Moses and admitted that God was acting through him. 10 This may have been mentioned in the book Paenitentia Iamne et Mambre, apocryphus, condemned by Pope Gelasius I (A.D. 492-6).11 This book probably also included the story that Iamnes died because of his opposition to Moses, and Mambres, using a book of his brother, conjured up his shade, which told him about the punishment in the Underworld and warned him

to be

deser

and

mont

Maho

from

syste

they

manu

right

of the

begin of Ca

simila

sourc

date,

Στίλβ

Kron

comp

works

piled.

it nee

was a

Ephe

astrol

Ox

I In British

Anglo-

Stud. i Studiu

'aperu

Iamnis

idolum

tioned

in Ael

l.c. 26.

cf. Ise

apocr.2

τούς το

3 Ba

4 Th

(Greek

triump

Vitae

Zambr

opposi

immed

2 Pa

It

¹ The gloss of Hesychius ἀμβρίζειν θεραπεύειν ἐν τοῖς ἱεροῖς shows that the fame of the magician was so great that his name became a term for healing.

² 2 Tim. iii. 8 δν τρόπον δὲ Ἰάννης καὶ Ἰαμβρῆς ἀντέστησαν Μωϋσεῖ, οὕτως καὶ οῦτοι ἀνθίστανται τῆ ἀληθεία....

³ Origen. ad Matth. xxvii. 9, Comm. ser. 117 (vol. xi, p. 250 Klostermann) quod ait: 'sicut Iamnes et Mambres restiterunt Mosi', non invenitur in publicis libris sed in libro secreto qui suprascribitur: liber Iamnes et Mambres. . . Origen apparently told more about this book: Theophilus of Alexandria accuses him of having taken a favourable view of these magicians, Hieron. ep. 96. 16; Theodoret. ad 2 Tim. iii. 8 (Patr. Gr. lxxxii. 848) . . . τὰ μέντοι τούτων δυόματα οὐκ ἐκ τῆς θείας Γραφῆς μεμάθηκεν ὁ θεῖος 'Απόστολος, ἀλλ' ἐκ τῆς ἀγράφου τῶν 'Ιουδαίων διδασκαλίας.

⁴ Pliny 30. 11; Apul. Apol. 90; cf. Bidez-Cumont, Les Mages hellénisés, 2, 11, 14 n. 23, 15.

⁵ Cf. Schürer, Gesch. d. jüd. Volkes, iii⁴, 402 ff. (with bibliography); Ganschinietz, RE. ix. 693 ff.; J. Andrée, RE. Suppl. vi. 238 ff.; Dibelius, Die Pastoralbriefe², 73. The Jewish tradition of the Middle Ages is collected by Strack-Billerbeck, Kommentar z. NT. aus Talmud u. Midrasch, iii (1926), 660 ff.

⁶ Cf. Euseb. Praep. ev. 9. 18, 23, 27; Weinreich, Gebet u. Wunder, 304 ff.

⁷ Euseb. 9. 8. I f.; cf. Origen. c. Cels. 4. 51 (Numenius) ἐκτίθεται καὶ τὴν περὶ Μωϋσέως καὶ Ἰαννοῦ καὶ Ἰαμβροῦ ἰστορίαν.

⁸ Barhebr. Chronogr., transl. E. A. W. Budge (1932), i. 12.

⁹ Hist. dynastiarum (ed. Pococke, 1663), p. 17; cf. Iselin, Zeitschr. f. wiss. Theol. xxxvii, 1894, 322.

¹⁰ Ambrosiaster ad 2 Tim. iii. 8 (Patr. Lat. xvii. 494).

¹¹ Patr. Lat. lix. 163; Dobschütz, Das Decretum Gelasianum, p. 54 (c. 5).

to be charitable on earth. Their tomb was visited by Macarius of Alexandria in the desert.2 The two magicians first made an oasis by digging a well and planting trees, and then built a square monument for themselves and deposited their gold; the monument was guarded by seventy-two demons. The last piece of evidence concerns Mahdi, king of the Arabs (A.D. 774-84), who was interested in divination and received from King Leo 'the "Book of Iannes and Iambres" which containeth the whole system of the magic and sorcery of the Egyptians and an account of everything which

they did against Moses the Great...'3

It may well be that one day some of these writings will turn up in our medieval manuscripts, Latin or Oriental. At present we have recovered a Greek text, if I am right in identifying Ambres-Iambres-Mambres-Zambres with Imbrasios of Ephesus of the codex Cromwellianus. This text addresses itself to educated Greek readers by beginning with doxographical matter, with the views of Hippocrates and Diocles of Carystus⁵ on the subject. In detail, it often agrees, even in the wording, with the similar works of Hermes Trismegistos and Pancharios,6 all depending on a common source, apparently the revelations of Nechepso and Petosiris (c. 150 B.C.). As to its date, Cumont observed7 that it uses the archaic names of the planets Φαίνων, Φαέθων, $\Sigma \tau i \lambda \beta \omega \nu$, etc., which disappeared in the first century A.D., giving place to the names Kronos, Ares, Hermes, etc.; it may belong to the Ptolemaic period. The place of its compilation is, of course, Egypt, where about the same time other iatromathematical works under the name of Nechepso-Petosiris and of Hermes Trismegistos were compiled. There is no reason to worry about the connexion of Imbrasios with Ephesus: it need not be any more true than the authorship of Imbrasios. Nevertheless, there was an island called Ephesus in the Nile,8 and I should be prepared to think of this Ephesus with the same justification with which one may hold in the case of another astrological writer, Hephaestion $\Theta\eta\beta a\hat{\imath}os$, that he came from the Egyptian Thebes. S. WEINSTOCK.

OXFORD.

nsisted

ing the

and the

ur text.

versa?

vour of

e truth

ried to

curious

nich St.

m from

igenous

ses and

writers

only in

doubt,

naps an

00 B.C.)

Moses.

Jewish

ry A.D.,

le'8 (or

cannot

'Moses

nother

osition

e been

y Pope

es died

njured

ed him

4, 402 ff.

RE. ix.

Dibelius,

lerbeck,

idrasch,

Wein-

s. 4. 51

έως καὶ

Budge

, p. 17;

ii, 1894,

tr. Lat.

ecretum

In the MS. Cotton. Tiberius B V in the British Museum (saec. XI), f. 87 in Latin and Anglo-Saxon, ed. by M. R. James, Journ. Theol. Stud. ii, 1901, 572 ff., and M. Foerster, Arch. f. d. Studium d. neueren Sprachen, cviii, 1902, 15 ff.: 'aperuit Mambres libros magicos fratris sui Iamnis et fecit nicromantiam et eduxit ab inferis idolum fratris sui ; they are further mentioned in King Alfred's notes on Oros. 1. 7 and in Aelfric's homily de auguriis; cf. Foerster,

² Pallad. Hist. Laus. 18. 5 (written c. A.D. 420); cf. Iselin, l.c. 321 f. Cf. Acta Pilati, 2. 5 (Ev. apocr.2, p. 297 Tischend.) είχον δε οί Αἰγύπτιοι τούς τοιούτους μάγους ώς θεούς.

3 Barhebr. Chronogr. i. 116.

4 The Acta S. Silvestri, fifth century A.D. (Greek: ed. Combefis, Illustrium martyrum lecti triumphi, 1660, 326 ff.; Latin: ed. B. Mombritius, Vitae sanctorum, ii. 525 ff.) make Ζαμβρής or Zambri a Jewish rabbi, the last of the twelve opposing St. Silvester; he whispers the secret name of God into the ear of a bull, which dies immediately; St. Silvester revives it, Zambres being unable to do it (on this motive cf. Cumont, Rev. hist. rell. cxiv, 1936, 19 ff.; Bidez-Cumont, l.c., i. 235). Zambres also in Mich. Glyc., p. 293. 5; 462. 1, ed. Bonn.

5 The authenticity of these fragments has often been discussed, see Schöne, Deutsche Medizinische Wochenschr., 1910, 418 f., 466 f.; Diels, Sitz. Ber. Berlin, 1910, 1140 ff.; Heeg, l.c.; Wellmann, Hermes, xlviii, 1913, 464; Capelle, Hermes, lx, 1925, 378; Kranz, Nachr. Gött. Ges., 1938, 130. 1.

6 The texts (Pancharios is edited in Cat. codd. astrol. 1. 118 ff.) were compared by Heeg, l.c., 996 ff.; cf. Cumont, l.c. (p. 41, n. 5), 131.

7 Cumont, l.c. (p. 41, n. 5), 123; id. Antiquité Classique, iv, 1935, 26; Bidez-Cumont, l.c., i.

⁸ Hecat. Miles. frg. 286 M. = 310 Jac. (Steph. Byz., s.v.).

9 Cf. Boll, RE. viii. 309.—[Addendum: On Zambres as alchemist see Zosim. alchem. 8 (Reitzenstein, Poimandres, 214. 1; Scott-Ferguson, Hermetica, iv. 111; Festugière, l.c., i. 366; 280; cf. Test. Solom. 25. 4.)]

ARISTOTLE'S TELEOLOGY AND UEXKÜLL'S THEORY OF LIVING NATURE

The purpose of this paper is to draw attention to a similarity between an ancient and a modern theory of living nature. There is no need to present the Aristotelian doctrine in full detail. I must rather apologize for repeating much that is well known. My endeavour is to offer it for comparison, and, incidentally, to clear it from misrepresentation. Uexküll's theory, on the other hand, is little known, and what is given here is an insufficient outline of it. I do not maintain that either doctrine is right. I am fully aware that the problem of the essence of living nature by no means admits of an easy solution. In offering for consideration the comparison contained in this paper I would go no farther than owning my belief that the two authors here discussed, both thinkers who combine an intensely philosophical outlook with a wide biological experience, are worth the attention not only of the historian of science and philosophy, but also of the student of philosophical biology.

One of the various meanings which φύσις bears for Aristotle is that of a cause. In the second book of his *Physics*, as is well known, he investigates the philosophical character of that cause. The result is what we are accustomed to call his teleology. He maintains that not only προαίρεσις but also φύσις is τῶν ἔνεκά του αἰτίων.²

This teaching has exercised a deep influence, especially throughout the Middle Ages. It has subsequently been discarded, especially since modern science established its mechanistic outlook on nature, which is strictly opposed to teleological explanations. Under its rule, a teleological interpretation of nature has been considered the arch-foe of scientific progress.

Aristotle clearly knows of two fields in which the $\tau \epsilon \lambda o_S$ is a causative force: Praxis and Nature. His doctrine that Praxis is teleological has not been challenged. That some end towards which man strives plays its part in the genesis of his actions and the events of human life at large does not seem an inadmissible assertion. The reason is that there exists, admittedly, $\nu o \hat{\nu}_S$, which directs itself to the $\tau \epsilon \lambda o_S$. But that in nature, which lacks $\nu o \hat{\nu}_S$, the $\tau \epsilon \lambda o_S$ should have some part in causation, seems, to say the least, puzzling to the modern mind. It may have appeared so to the ancients as well. We gather from Aristotle's defence that among his own contemporaries the opponents of teleology based their disbelief on the fact that in nature, though a something is moving, we do not see it taking thought.³ Aristotle admits the observation to be right but not the conclusion. He asserts that nevertheless the motions in nature are directed towards some $\tau \epsilon \lambda o_S$.

Aristotle's teleology arose not only as an elaboration of Platonic thought⁴ but also in explicit opposition to the atomistic theory, which made all physical processe—and it knew of no other than physical—occur e² avayrys. We are accustomed to regard that theory as a first attempt at a mechanistic world explanation. It appears to be, in its foundations, an ingenious forerunner of modern physical science. Yet mechanism in its strict sense is not to be found in antiquity, as has been clearly

that it cannot be separated from its environment, should be particularly mentioned in this connexion, though I must here refrain from further describing his views.

shown classica as an ir future ' the mo of befor teenth apparer biology Ananke Aristot unpred were in atomist did not of Anar ism is a ing an world's result o

But concerr failure his tele 1 D. 1 ism. I. xxxiii, C.Q. xxx 3 Cf. (Aristotle natural produce the ord mechani p. 132: criticism the very defend t matic in phenom everythi untenab produce

Aristotle

with ord

by a cre

nexus o

contemp contemp criticize

principle

move m

to Arist

him to

unless g

he atta

¹ The problem has been, and still is being, discussed by biologists and philosophers all over the world, and no agreement has been reached between those who defend and those who oppose mechanism in biology. J. S. Haldane's insistence that the organism is a wholeness of a living being, and a system informed by an organic plan, and

² Phys. B 8. 198b10, and passim.

³ Ib. 199b26.

⁴ Cf. Phaedo 97-8.

shown by Mr. Balme. By mechanism, here, is meant the basic methodic idea of classical physics: that of an invariable cause-and-effect nexus. This idea implies, as an indispensable element, that the nexus will never break off. It continues for all future time. Now it is precisely in this that all ancient theory differs from that of the modern world. For an all-embracing nexus could not be and was not conceived of before the great astronomical and physical discoveries of the sixteenth and seventeenth centuries. Mr. Balme brings to light this distinction first by investigating the apparently mechanistic implications in Aristotle's system. Certain phenomena in biology are ascribed to 'hypothetical Ananke'. But the causal nexus due to this Ananke 'peters out'.2 Ananke does not determine all successive stages. Therefore Aristotle could, as he clearly did, believe all sublunar processes to be by nature unpredictable, not only owing to the limits of the human intellect, but because they were in themselves indeterminate. Mr. Balme then shows the same to be true of the atomists. In spite of their general interpretation of change as due to Ananke they did not reach the modern conception of mechanism because they never conceived of Ananke as going on in its effects for all time. This vital feature of modern mechanism is absent in both ancient theories. Their Ananke was not conceived of as governing an endless sequence of effects. Hence it differed essentially from the modern world's idea of necessity. Thus far I feel myself to be in full agreement with the result of Mr. Balme's lucid investigation.

But I differ from him with regard to the conclusion which can be drawn from this concerning teleology. Mr. Balme suggests that it was Empedocles' and the atomists' failure to account for 'the orderliness of nature' which prompted Aristotle to offer his teleological theory.3 This shortcoming, he thinks, has since been overcome, for

D. M. Balme, 'Greek Science and Mechanism. I. Aristotle on Nature and Chance', C.Q. xxxiii, 1939, pp. 129-38; 'II. The Atomists', C.Q. xxxv, 1941, pp. 23-8.
² C.Q. xxxiii. 138. Cf. C.Q. xxxiii. 129: 'The chief weapon which Aristotle finds to use against the φυσικοί is that natural physical interactions could not, unguided, produce the orderly world. Yet it is precisely the orderliness of nature which the modern mechanist invokes in his own defence.' Ib., p. 132: 'Lastly there is Aristotle's unceasing criticism of the φυσικοί. He attacks them with the very weapon with which they would now defend themselves: if everything is due to automatic interactions in nature, how is it that phenomena are so orderly?—The φυσικοί refer everything to Ananke: but this is manifestly untenable, for Ananke and chance could never produce an orderly world.' Ib., p. 137: 'he (sc. Aristotle) could not credit natural processes with orderly behaviour unless they were guided by a creative impulse towards ends. An orderly nexus of automatic causes and effects is not contemplated by him. The nexus which he contemplates in his attack on Empedocles is criticized as disorderly.' C.Q. xxxv. 23: 'The principle that a moving body must continue to move unless something stops it was not known to Aristotle. . . . This ignorance . . . compelled him to believe that nature could not be orderly unless guided by a purposive force. Therefore he attacked those scientists who had thought

RY

ancient

otelian

known.

srepre-

given

s right.

admits

in this

cussed. logical

sophy,

cause.

phical

eology.

Middle

lished

plana-

idered

Praxis

That

s and

eason

nat in

o say

cients

raries

nough

erva-

ns in

4 but

ed to

pears

Yet

early

ment,

con-

irther

ses-

that the world could be explained in terms of the compulsions and interactions of natural stuffsa principle which they vaguely called Necessity, Ananke. In attacking their doctrine Aristotle cannot have thought he was attacking the mechanistic determinism which modern critics have detected in their words: for he could not even conceive of such an idea.' Ib., p. 27: Epicurus saved the human mind from random behaviour, but he could not save his world from it. It seems likely that in the interval between him and Lucretius his opponents fastened upon that point, asking (with Aristotle) how atomism could account for the orderliness of nature (a question which has no cogency against Laplace). Ib., p. 28: 'But he (sc. Lucretius) has not explained why nature should be so overwhelmingly regular in achieving motus convenientes, and why the abortive combinations are so conspicuously in the minority. On this point the Epicureans did not advance a step on Empedocles, and the answer which he had got from Aristotle was repeated to Epicurus by the Stoics.'

To the present author it would seem that the Stoics, like Aristotle, were in the right with their criticism, and, what is more, that Aristotle's question does possess cogency even against Laplace. Mr. Balme thinks of mechanical order only, but the orderliness of nature which fascinates Aristotle is not explained by modern mechanism either, and defies all mechanistic

explanation.

he sees its source in their failure to conceive of the causal nexus as going on for ever. According to Mr. Balme, Aristotle rightly felt the weakness, but, instead of improving their mechanism, replaced it by teleology. The implication is that with modern,

i.e. perfect, mechanism at hand we need no teleology.

Mr. Balme's attitude to this question follows consistently from a belief in the physicist's method as the royal road in matters of causation, a belief shared by many. Teleology has been discarded. Physical mechanism is to satisfy the desire for a consistent explanation of the order in the world. Many scholars of Greek philosophy, following the lead of science, its logic, and its methods, take the same view.

But is there not an ambiguity in thus speaking of 'the orderliness of the world'? The physicist's world order is one thing, the 'orderliness' which the teleological theory envisages is another. All physical processes obey one and the same law, and form one interconnected system of change. They are directed by one and the same kind of cause, a moving cause, pushing, as it were, from behind, producing an orderly result, no doubt, i.e. acting with exactitude, effecting invariably the same result under the same conditions, yet pushing blindly, not minding what the result may be, or rather what it may mean. In this feature modern mechanism does not differ from ancient atomism, although it provides the basis for a more perfect order of nature than antiquity could conceive. It was certainly not this order which Aristotle had in mind. The eighth chapter in the second book of his Physics, where he expounds and defends teleology, shows that his eye was turned towards some other orderliness, or rather some organization, which he found in the world at large as well as in single parts of it. This awakened all his admiration and seemed to him to deserve all efforts in investigation. The phenomena which he is trying to account for are such as: the influence of the weather on the prospering of corn and fruit; the construction of a man's, or an animal's, teeth which are different from each other, each one well fitted for the special task it has to perform; the seemingly clever and well-organized behaviour of a spider, of ants and bees, of a swallow; the purposeful structure of a plant, where we find leaves protecting the fruit, and roots digging deep down into the ground for food. This, to his mind, is not the order established by the pushing cause. The evidence which he perceives in the individual living being as well as in the organization of groups of living beings or even in different parts of nature in their relation to each other, is of such a kind as to make him think of a plan, although, as he is anxious to state, we see nobody planning. He gives expression to this phenomenon by stating that things tend towards the achievement of some $\tau \acute{\epsilon} \lambda o_s$. In later times the same evidence has given rise to the terms organism and organization. The startling and puzzling feature is that there is not so much a pushing from behind as a pulling from what is ahead, not a vis a tergo but a vis a fronte. This principle which seems to direct natural motions does not exist as a thing exists and cannot be perceived by the senses. It is unlike material and perceptible things. Aristotle calls it the τέλος. This appears to be non-spatial, and so, if I may venture the term, spiritual. The mechanist finds it hard even to detect it. Therefore, however important insight into the difference between ancient and modern mechanism may be, it cannot lead, on the ground that consistent mechanism solves the problems which nature presents, to the discarding of teleology. It must be maintained that the orderliness of nature which Aristotle had in view has not found and cannot find a satisfactory interpretation by means even of the most perfect mechanism. The reason why Plato and Aristotle

τέχνη is one special kind of setting-into-motion within Praxis. Therefore, here as in all πρᾶξις, νοῦς, in the form of λόγος, is found to be playing its part: τέχνη is ἡ μετὰ λόγου ποιητική ἔξις (Eth. Nic. Z 4. 1140°4).

were s solely but so world and a betwe ninete on the There mecha to a g Yet e its he a met nature of the not ha than

intens

To proble can be For A we we mecha betwe of livi nature is at v staten part o as tele field, i the lea of ani develo prima view o defy a metho

It wider world

I C.Q

¹ Cf. above, p. 44 and ib., n. 3. In marked contrast to φόσις there is in τέχνη a planning agent, who is different from, and exists outside, the thing which undergoes the change. This agent is a human being, and he is led by νοῦς.

² A. nature, separate daries observe between and see similarl

were so thoroughly opposed to all descriptions of natural motions and changes as due solely to Ananke was not the imperfection of the mechanical theories in question but something more fundamental: they were opposed to materialistic and mechanistic world explanation as such. It was against their deepest convictions that all events and all change in the world should be due to mechanical causes. The controversy between the two parties in antiquity is, to my mind, fundamentally the same as the nineteenth-century struggle between a materialistic science and its methods and logic on the one hand and an idealistic philosophy and view of the world on the other. There is no doubt this difference, that among the Greeks idealism prevailed, while mechanism, as Mr. Balme points out, did not appeal to the best minds and never to a great number. In the modern world the position has become deeply changed. Yet even in the nineteenth century, at a period when mechanistic thought was at its height, there arose again in biology 'vitalistic' theories, and the need for finding a method proper to biology has been felt anew. Far though modern investigation of nature has gone beyond the primitive attempts made by the Greeks, yet, in questions of the philosophical outlook underlying scientific research, their discussions may not have become obsolete. Always aware of essential problems and less hampered than we are by vastness of knowledge and intricacy of detail, they have shown intensity as well as acuteness in tackling fundamental issues.

To maintain that some kind of spiritual interpretation of nature is a serious problem means departing from the physicist's basis. Perhaps, in fact, the biologist can be a safer guide than the physicist for an evaluation of Aristotle's views on nature. For Aristotle deals so predominantly in his numerous writings on nature with what we would call biological phenomena. They prevail over the purely physical, i.e. mechanical problems discussed by him. There is, of course, no clear demarcation line between the two, since physics as such had not yet been constituted. Observation of living beings guides his general conception of nature. He does not say how far in nature animateness reaches. All he clearly states is that $\psi_{\nu\chi\eta}$, as the principle of life, is at work not only in animals but also in plants. Beyond this he makes no clear statement on this point. The stone, it would seem, is not animate. Yet even that part of nature which is without soul seems to be included in his conception of nature as teleological. We miss a precise exposition of his idea of inanimate nature.² This field, in which modern science has made the greatest progress, seems to have obtained the least satisfactory interpretation from Aristotle. But we have his elaborate account of animals and their mode of being; and the philosophical idea of nature which he develops on this ground purports to cover the whole of sublunar nature. It is, then, primarily with biological phenomena in mind that an understanding of Aristotle's view of nature should be attempted. Now if these, as some modern thinkers believe, defy all consistently materialistic approach, then the problem of a non-mechanical method of interpretation cannot be regarded as obsolete.

It may or may not be an error of Aristotle's that he applies his teleology to a wider field than that of biological phenomena. It is more evident that the modern world has gone astray in doing the reverse. Physical interpretation has overstepped

r ever.

roving

odern.

in the

many.

a con-

sophy.

vorld'?

theory

d form

e kind

orderly

result

nay be,

r from

nature

le had

oounds

rliness,

single

efforts

as: the

litted

anized

re of a

n into

ushing

l as in

n their

igh, as

pheno-

n later

. The

ind as

which

e per-

calls it

iritual.

nsight

t lead,

esents, nature

tation

istotle

motion

πράξις,

playing

क्षे हैं।ड

¹ C.Q. xxxv. 28.

² A. clearly holds that the various realms of nature, such as $\delta\psi\nu\chi\alpha$, plants, animals, are not separated from each other by definite boundaries but show gradual transitions. He had observed in the sea living beings intermediate between plants and animals (*Hist. anim.* Θ 1) and seems to have thought that there exist similarly transitionary phenomena between

άψυχα and living beings. He definitely states that ἐκ τῶν ἀψύχων εἰς τὰ ζῷα μεταβαίνει κατὰ μικρὸν ἡ φύσις (Hist. anim. Θ I. 588^b4); similarly ἡ γὰρ φύσις μεταβαίνει συνεχῶς κ.τ.λ. (De part. an. Δ 5. 681^a12 ff.). In anticipation of the discussion below it may here be mentioned that Uexküll likewise inclines to believe in the unity of organic and inorganic nature.

its limits and attempted to rule over regions in which the existence of $\psi \nu \chi \dot{\gamma}^{\rm I}$ cannot be denied. By contrast Aristotle possessed a clear sense of the importance of applying the specific method of investigation appropriate to each field of being. Each region of $\delta \nu \tau a$ has its distinct ontological character, following from its specific $\dot{a}\rho \chi a \dot{l}$. In accordance with it the method of cognition in each field has to be shaped.²

In our times, the biologist J. von Uexküll has undertaken to outline a new theoretical biology.³ His idea of nature and the spirit of his attempt at an adequate theory of nature appear to me to be akin to Aristotle's. I propose here briefly to outline some features of his biology in order to indicate the relation which I believe

to exist between Aristotle's views and this modern conception.

Uexküll wishes to replace the *mechanistic* science of living nature by an interpretation and investigation based on the obvious though immaterial phenomenon of a *plan* (*Planmässigkeit*, *Plan*) in nature. He stamps *physiology*, i.e. the physical and chemical investigation of plants and animals, as purely *mechanistic* and therefore missing the basic character of a true *biology*, whose concepts and methods of investigation must be directed by a grasp of the central life-phenomenon, the *plan*. This insight has not only come to him by free observation of nature, but has been confirmed

by experiment.

Uexküll, like other biologists before him and with him, has carried out experiments specially devised in such a way as to show by their outcome whether or not a plan is at work. The term plan does not imply any planning intelligence as the origin of the Planmässigkeit in nature. Uexküll appears to regard this problem as beyond the due limits of the biologist, for he has to restrict his statements to what he actually finds in nature. He does not find any planning agent but he does find the plan. The plan is immaterial, inaccessible to sense-perception, and yet a demonstrable phenomenon, found to underlie and to direct natural motion and change. This leads him to discard all materialistic explanations of life processes. On the other hand, Uexküll wishes biology to keep equally free from psychological interpretation. The animal itself is not the planning agent. To interpret animal behaviour by analogy with the actions of a human being is unbiological, because it fails to do justice to the subject-matter just as much as mechanical views. Biology is bound to recognize non-human organic nature as something sui generis. It lies, as it were, in between inorganic matter and man. It is the positive character of this intermediate phenomenon which Uexküll wants to express by the term Planmässigkeit.4

The biologist discovers in the embryo as well as in the developed animal sequences of impulses directed by rules. These rules (*Impulsregeln*, *Regeln der Impulsfolgen*) are observable. They can, with the help of well-devised experiments, be analysed in precise details. These rules represent the *plan*. Modern biological research has given

¹ I here take $\psi v \chi \eta$ in the Aristotelian sense as = principle of life, including the life of plants and animals.

² Here we have to remind ourselves of the distinction, so fundamental in Aristotle, between $\tau \dot{a}$ $\dot{a} \dot{\epsilon} \dot{i} \delta \nu \tau a$ and $\tau \dot{a}$ $\dot{\epsilon} \dot{\nu} \delta \epsilon \chi \delta \mu \epsilon \nu a$ $\dot{\epsilon} \dot{\nu} \delta \epsilon \chi \delta \mu \epsilon \nu a$ Accordingly, the respective modes of cognition differ from each other. It is only concerning the invariable that strict knowledge is possible. The $\dot{\epsilon} \nu \delta \epsilon \chi \delta \mu \epsilon \nu a$ admit of $\delta \delta \dot{\epsilon} a$ only, i.e. of a not firmly established way of thinking about them, since they themselves are not firmly established but variable. Plato likewise had held the view that the ontological character of what is being cognized

determines the mode of cognition. We may compare his discussion of $\epsilon m \sigma r \eta \mu \eta$ and $\delta \delta \xi a$ towards the end of Republic E (477 ff.). With regard to nature, accordingly, Aristotle endeavours to show in Physics B 2 how the method of discussion must follow from the subject. See below, p. 51.

³ J. von Uexküll, Theoretische Biologie, 2nd edition, Berlin, 1928. Cf. also Baron Uexküll and G. Kriszat, Streifzüge durch die Umwelten von Tieren und Menschen, Berlin, 1934.

4 Theor. Biol., p. 144: 'Higher rules are called plans, regardless of whether or not they rest on human intentions.' new and especially material. The result produce halves. expected complete most documents.

Emb be at wo to a plan special a himself in of Pure I to be co Uexküll has its sp is not id the world surround (Wirkwel extended the anim within th ingly, a primitive actions. no means differs fr It is perl subject-r specific v ing of th

> Third a great p bear with experime

teleologic

the anim

¹ Op. ci ² We con Arist.'s on in *De anii* while analy ways in was equipped and perceptor of space, possess at a discussion senses, thu

new and rich insight into the differentiation of the working of these rules in one field especially, that of embryology. Driesch eliminated, in an animal embryo, some material which would normally have developed into some definite organ or limb. The result was that the embryo transformed some other material in such a way as to produce that organ or limb. Further, Driesch cut the eggs of sea-urchins into two halves. The result was not the development of two halved animals (as was to be expected on the basis of *mechanistic* science), but the halved germ grew into two complete sea-urchins, each half the size of the normal animal. Even the scientist most doubtful of a plan, so Uexküll points out, would admit that the results of these experiments show the insufficiency of mechanical explanation.

Embryological processes, however, are not the only field where a plan is found to be at work. The behaviour of a finished adult and all functioning of his life conform to a plan as well. To this problem of the animal's life in its world Uexküll has given special attention. His conception of a world needs some comment. He here knows himself indebted to one of the main conceptions of Kant's philosophy. In the Critique of Pure Reason man's world is interpreted in such a way as to correspond to, and even to be constituted by, the structure of man's understanding and cognitive powers. Uexküll wishes to extend this interpretation to all animal species. Each species has its specific structure, and correspondingly, its specific world. The animal's world is not identical with our world, nor is the world of one animal species the same as the world of another. The animal's world is constituted by what it perceives of its surroundings (Merkwelt) and by the extent to which it acts on its surroundings (Wirkwelt). By adding to the world of perception a world of action Uexküll has further extended Kant's thought. There is a perfect correspondence (Einpassung) between the animal's perceptive faculties and its Merkwelt, that is, those sensible characters within the world which alone are and need be accessible to it. There is, correspondingly, a perfect correspondence between its active faculties and its Wirkwelt. A primitive animal, e.g. a tick, perceives very few qualities and reacts with very few actions. Higher animals have richer and more complicated worlds, though this by no means makes their functioning any surer. Each animal's specific world (Umwelt) differs from what we call its surroundings, which are noticeable to man (Umgebung). It is perhaps the decisive and the most original feature of Uexküll's biology that its subject-matter is never the animal in isolation but the animal together with its specific world, whose subject (in a philosophical sense) the animal is.² An understanding of this phenomenon, the living being within its specific world, is related to the teleological outlook. The mechanist cannot catch sight of this world, he sees merely the animal's surroundings.

Thirdly, all processes of healing, or, more generally speaking, the ways in which a great part of the injury done to a living being's body is repaired by that body itself, bear witness to a *plan* in nature. In the field of this third phenomenon again, Driesch's experiments had given new insight and fresh impulses to biological research. We

not be

plying

region

aí. In

a new

equate

efly to

elieve

inter-

nenon

ysical

refore

stiga-

nis in-

irmed

ments

lan is

of the

e due

finds

plan

enon,

scard

rishes

itself

tions

atter

ganic

r and

xküll

ences

lgen)

ed in

given

com-

wards rd to

show

ission

. 51.

, and

xküll

velten

alled

rest

¹ Op. cit., p. 148.

² We can compare, to a certain extent, Anist.'s ontology of the living being, as presented in *De anima*. For he also takes into account, while analysing the powers of $\psi v \chi \dot{\eta}$, the various ways in which an animal possesses a world and is equipped for it, by its two faculties of motion and perception. Plants grow into all directions of space, but they lack perception. Animals possess $\alpha i \alpha \partial \eta \sigma i s$. Colour, sound, smell, and taste are discussed as the $\dot{\alpha} \nu \tau \kappa \epsilon i \mu v \nu \kappa i \mu v$ senses, thus forming part of that phenomenon

which is called a living being. Correspondingly, man's highest faculty, νοῦς, cannot be interpreted without an understanding of the νοητά. They do not exist in the animal's world, but they form part of the human world. Uexkūll's analysis, naturally, is confined to the animal's world. Here, however, he goes far beyond Arist. by tracing out, with the help of experiments, exactly what the world of every one species is like, as distinct from the worlds of the other species.

may here follow his own account. Driesch was able to show that where parts of a developing animal which are already in existence (and are no longer mere embryological material for certain parts to develop) are damaged or even cut away, the animal's body reacts, by some method or other, in such a way as to repair the damage. Driesch describes the methods used by nature for that purpose under two headings, In some cases the animal, part of which has been excised, will be found to complete its own body again. Starting from the cut surface the missing part of the body will sprout forth anew. This is, in Driesch's interpretation, a genuine regulation. The cut surface has produced, as he puts it, an additional achievement (Mehrleistung), i.e. there is a plus as compared to what would have been the same matter's normal achievement had no cut been made. In some cases the animal is found to respond by a second method. The histological nature of bodily parts already in existence can be found to change in response to the damage. It may even have to start this process of alteration by a retrogression, which, by introducing a more thorough shifting of the structure and of the functions of the various parts, achieves in the end the construction of a body which is again complete and fit. Driesch calls this way of making up for the damage a metamorphosis (Umbildung). It attains its end not by a mere Mehrleistung but by an Andersleistung: the achievement has been altogether altered. This is an even more admirable feat of nature than is genuine regulation. The two phenomena together show the animal's capacity for self-repair according to some plan.

On the basis of such experiments, and some additional observation and research initiated by himself, concerning the animal in its world, Uexküll recognizes three

distinct plans in animal life which may now be summarized as follows:

There is a plan for building up the animal out of the fertilized germ. Embryological research shows that the animal itself, through various stages of increasing differentiation of cell-material which tend to develop a complete animal, constructs its own body, in accordance with rules at least as ingenious as those according to which a machine is built.

- 2. The animal directs by itself the management and working of this quasi-machine once it has been built up. This working is neither purely mechanical, i.e. altogether lacking direction with reference to its outcome, nor is it guided by an intelligence within the animal. It is rather a special phenomenon with distinct features of its own. Uexküll has investigated it under the leading idea that the animal and its world form one inseparable whole. Thus studying the animal in its world he has found ample evidence of Planmässigkeit.
- 3. The animal is capable of undertaking by itself repairs, if the body-machine which it has built and which it is using, suffers any damage. The rules (or plan) according to which the repair is carried through are naturally distinct from the plans both for building up the body and for using it.²

In all this, it will have been seen, the animal seems to show a certain similarity to a machine, for a machine or tool also is constructed according to one plan, functions during its use according to another plan, and can be repaired in accordance with a third plan. But the fact that it is the animal itself which directs construction,

¹ Cf. Driesch, *Der Vitalismus als Geschichte* und als Lehre, Leipzig, 1905, esp. pp. 193 ff. It should be noted that while Driesch's experiments are illuminating, his theory as a whole is misleading.

² Among the three plans, the plan for the functioning of adult life naturally has priority.

Uexküll mentions that the rule for functioning dictates the rule for genesis. That the rule for repair is, in its turn, dictated by the rule for the finished animal's life functioning is self-evident. Hence also the animal—world relation is of comprehensive importance.

manage and an

In thing, a being h itself, a striking réxyn oin the s nature, reject a nature various central emphas ceptions concept

plans (i. each other than to be distincted)

This

that one repetition is no graspecies of from the as it goe part of t (We man logy.)4 In Uexkevolution pretation

The a to the too we come animal, the yet the antrue. The played a gearching 2 Phys.

3 The w stood to be comparison fully to rea some sma animal. M anything of operates in an existing management, and repair shows the fundamental difference between a living being and any machine.

Uexküll lays stress on the fact, not usually realized in biology, that the three plans (i.e. for genesis, for the functioning of adult life, and for repair) are distinct from each other. Each obeys its own purpose and, accordingly, has a law of its own. It has to be noticed, as a mark of this distinct character, that the working of one plan or the other sets in abruptly, not by any gradual transition. There is a sudden and

distinctive change in all processes when a new plan begins to work.

This observation, to his mind, disproves the theory, once so influential in biology, that ontogenesis, i.e. the development of any individual animal, is an abbreviated repetition of phylogenesis, the assumed gradual development of its ancestors. There is no gradual passage from one species to another, and no gradual development of a species towards perfection. He states definitely that every species as such is perfect from the very beginning. To express the same thing in other terms: each plan, as far as it goes, is perfect. This idea of perfection, properly understood, forms an integral part of the conception of a plan in nature. The plan is, as it were, one all-round whole. (We may compare the concept of a Ganzheit and its role in modern German psychology.) The whole is prior to its parts. The plan is something consummate in itself. In Uexküll's opinion, all evolutionary doctrines have to give way. The theory of evolution represents, to his mind, the specifically modern form of mechanistic interpretation of biological phenomena.

¹ The analogy of the three plans is applicable to the tool as well as to the machine. But when we come to the feature of self-motion in the animal, this is no longer comparable to a tool, yet the analogy to a machine still seems to hold true. The *machine-theory*, accordingly, has played a great rôle in biology. Uexküll, however, searching deeper, shows its inadequacy.

² Phys. B 1. 192b13 ff.

arts of a embryo-

way, the

damage.

eadings.

complete ody will

The cut

ing), i.e.

normal

respond

xistence tart this

horough

the end

s way of

l not by

gulation.

rding to

research

es three

Embryo-

creasing

al, con-

as those

quasi-

hanical,

guided

on with

leading

tudying

machine

ules (or

distinct

milarity

nctions

ce with

ruction,

nctioning

rule for

e for the

evident.

of com-

it.

³ The word agent, of course, must be understood to be a mere metaphor, arising from the comparison with human craft. From a failure fully to realize this springs the misconception of some small being or life-force existing in the animal. Neither Uexküll nor Aristotle means anything of that sort. To them the cause that operates in the living being is not separable like an existing thing. It is of the very essence

of nature, as distinct from craft, that there exists no agent, no force, but what is found is a peculiar mode of being. In other words, the living being as a whole has this specific mode of causation.

⁴ The school of Gestalt-Psychologen thinks of Gestalt or Ganzheit as a primary phenomenon, not in organic life only. Uexküll considers Gestalt as an even more fruitful concept than Ganzheit. In agreement with Driesch he wishes to restrict the use of both concepts to organic nature. In inorganic nature we find merely sums but no wholes. In his view, it is the idea of Planmässigheit that underlies both phenomena, Gestalt and Ganzheit (op. cit., p. 199). The Greeks, I think, who spoke of είδος, μορφή, and τέλος must have possessed this insight which modern science is reacquiring.

Uexküll's search, aiming at the *foundations* of biology, can be compared with Aristotle's notion of specific $\mathring{a}\rho\chi a \mathring{l}$ underlying each region of being and constituting it, and his strict and methodic search for the $\tau \mathring{l}$ $\mathring{e}\sigma\tau \iota$ of every region. Thus *Physics B* is a search for the what or essence of nature. The result is that nature is found to be an $\mathring{a}l\tau \mathring{l}a$ $\mathring{e}\nu\epsilon\kappa \mathring{a}$ $\tau \iota \nu o s$. And it is from this essence that the $\phi \nu \sigma \iota \kappa \acute{o} s$ has to take his directions as to how he must discuss nature.

Uexküll contests the view that after ages which produced animals of primitive structure there began gradually the formation of animals with a more and more complicated build. Darwinism had imagined this to have happened by the survival of the fittest, and Lamarckism explained it by assuming gradual adaptation. This trend of thought admitted of no plan in nature. Nature seemed to work blindly. For these biologists, although seeing in nature some fitting together, i.e. some apparently teleological evidence (e.g. animals well equipped with what they need in life), and setting out to explain this evidence, yet, by their thoroughly mechanistic interpretation, rather than explaining it explained it away. The attaining of a purpose—so the Darwinist argues—is not due to any striving towards it. It happens merely by chance that an end is attained. (This owing to chance means at the same time: by purely mechanical reasons, as opposed to any kind of purpose.) This idea repeats precisely the philosophical position of the Atomists as described by Aristotle.

Uexküll, on the contrary, maintains that nothing essential in living nature can be brought about by mechanical causes. All *fitting together* gives evidence of the underlying *plan*. He refuses to admit of *Anpassung* (adaptation) and suggests in its place, as a basic biological concept, that of *Einpassung* (fitting together, fitting into). This means that in each animal species we find a structure precisely fit for the special task of the animal. The animal's body, habits, and perceptions correspond exactly

to the qualities of its world.

It is in keeping with Uexküll's basic idea of biology that he strongly emphasizes the epigenetic character of the embryological process. It had been supposed for some time that a differentiated and fully structured animal existed within the fertilized germ, so that all that was needed was that it should unfold and thus come to visibility, like a bud opening up and turning into a leaf or flower. The embryological research that followed, especially that undertaken by Driesch, finally disproved that idea. The primitive homogeneous cell produces, in successive stages, again and again, as it were, new creations. It creates ever new differentiations which lead to the existence of the organs. What exists in the later stage has not existed before. It is due not to mere unfolding but to some creative activity within the germ. There is, within this, a power of bringing into being a new multiplicity. The growth proceeds towards increasing complexity. (Uexküll therefore suggests the term Verfaltung instead of Entfaltung, or Verwicklung instead of Entwicklung, because the germ undergoes a more and more complex folding. We may call it involution rather than evolution, or envelopment rather than development.) The view had been accepted, and the theory of epigenesis had replaced, in embryology, the theory of praeformation, long before Uexküll.

Similarly Uexküll emphasizes that the functioning of the life of any species is due to the underlying *plan* or organization, and therefore—to express the same belief by a different wording—he regards the genesis of a species as a *creative* process. He may seem extreme, and even reactionary, to modern biologists in his denial of a genesis of new species.² After the height of the evolutionary period,³ so he points out, new

1 Theor. Biol., p. 195; ibid., p. 148.

mission of a splitting into sub-species, so that it is merely on his *interpretation* of the evidence that he differs. See below.

3 'Variation [scil. of species] is, according to

researc about 1 convin in perfe The co only, a which coming contrac precise multipl can occ are the Such ra all we A new (Funkt cannot in wha not to

jerks, h at the s of an o possess sudden menon summa in natu

Uex as nonof repa beginni achieve the one ὑπόθεσι existen It is

which mechan living rathis mecomple the Darduces live them the cal way, not fit fo fittest' (constitution of the constitution of the constitution

only to a

² It will soon be found, however, that Uexküll does justice, after all, to what is considered as undeniable evidence in this matter, by his ad-

red with

stituting

hysics B

nd to be

primitive

nd more

survival

on. This

blindly.

e. some

need in

chanistic

of a pur-

happens

he same his idea

istotle.

ture can

e of the

sts in its

ng into).

exactly

phasizes

or some

sibility, research

ea. The

n, as it

xistence

e not to

in this,

tead of rgoes a

tion, or

theory

before

s is due elief by

le may

genesis

it, new

so that

evidence

rding to

researches had led many biologists to restrict and carefully qualify their statements about the gradual development towards new and higher species. He himself is fully convinced that every species is perfect from the start. There is no gradual accretion in perfection. It may be noted that Aristotle, similarly, held that species are fixed. The coming into being of new species is admitted by Uexküll in a very limited sense only, and he stresses the fact that it represents one of those problems in biology about which we still know exceedingly little. But of one thing he feels sure: that this coming into being is of a character quite different from embryological genesis. In contradistinction to it, he is inclined to call this an evolution, taking this term in its precise sense. When a new species arises, absolutely no new creation of a further multiplicity occurs. Since every existing species is complete from the start, all that can occur is that it may split into several varieties, called races. The more numerous are the different genotypes within a species, the more easily such splitting may occur. Such races which have been gained by splitting can then form new species. 'That is all we can say of the genesis of new species. This we can say with great probability.'2 A new species is characterized by what Uexküll calls a new sphere of functioning (Funktionskreis). The whole structure is altered and is centred in a new way. This cannot happen gradually but must proceed in jerks. 'We do not know yet when, in what way, and by what cause new spheres of functioning arise. But it is better not to know than to cherish a false knowledge.'3

The view, stressed by Uexküll, that the processes set in not gradually but in jerks, holds true of both types of processes, the origin of a species (which must mean, at the same time, the beginning of an animal's life functioning) as well as the genesis of an organism from a fertilized germ, the latter being the one about which biology possesses a far richer knowledge. It is self-evident that repairing processes, which suddenly set in when an injury has occurred, show the same character. This phenomenon of jerks in all kinds of processes (corresponding to the three kinds of plans summarized above on p. 50) is an indication of what Uexküll calls the Planmässigkeit in nature. The processes start by jerks, because in all of them we are confronted with epigenesis, not with evolution.

Uexküll's decisions, then, on various topics (the development of a fertilized germ as non-mechanical, the functioning of the animal's life as well planned, the processes of repair as likewise planful, these three plans as distinct from each other, the abrupt beginning of their working, their immediate perfection in contrast to a gradual achievement of greater perfection) are closely interconnected. They all follow from the one basis, which for Uexküll is more than a mere working hypothesis, rather a imioheaus in the Greek sense that, as an observer of nature, he finds it everywhere in existence, underlying all processes: namely, the imioheaus of a plan in nature.

It is from this basis that we have to understand his statements about perfection, which otherwise may seem absurd. They all represent the counterposition to any mechanistic theory, by aiming at showing the *plan* as the primary phenomenon in living nature. If a plan, and this implies some whole, precedes and guides the parts, this means that something complete directs the single data. It is, we may infer, this completion which Uexküll calls a *perfection*. The completion must be perfect, other-

the Darwinists, a chemical process, which produces living beings completely *planlos*. Among them the struggle for life eliminates, in a mechanical way, those which are unsuited, i.e. which are not fit for life, thus attaining a selection of the fittest' (op. cit., p. 195).

¹ Uexküll wishes to apply the term evolution only to a mere unfolding (in accordance with the root-meaning of the word), i.e. to an evolving

of what has already existed. He insists that the word is incorrectly used with regard to processes that tend towards increasing perfection, or make something new arise.

² Op. cit., p. 196.

³ Op. cit., p. 198.

⁴ Loc. cit., pp. 98-9: 'In allen Fällen wird etwas Neues geleistet . . ., nirgends Evolution, immer Epigenese.'

wise the plan would not be really completed, and the system could not function. All single data and events are well fitted into each other. If there were any gap in this fitting, the working could not take place. Each animal species thus represents a system of its own, different from any other, but of such a kind that within this system every detail springs from the perfect plan. That is why Uexküll can state that all plans of nature are perfect. His idea of perfection is inherent in, and inseparable from, his idea of a plan in nature. For this reason also he states that every species is perfect, or, what is equivalent: 'Ein jedes Lebewesen ist prinzipiell absolut vollkommen'. The phrase die Vollkommenheit der Natur really means die Planmässigkeit der Natur, so that Uexküll's sentence 'Die Planmässigkeit der Natur ist vollkommen' can be called a tautology. For he says: 'If the Planmässigkeit of nature could be proved to be imperfect, then the Planmässigkeit of nature would be no more than a mere illusion, and what we have admired as Planmässigkeit might turn out to be a play of Chance, as the Darwinists in fact assume.'

I cannot help thinking that this modern biological conception of a plan and of perfection is focused on very nearly the same thing which Aristotle had in mind when speaking of a $\tau \epsilon \lambda o s$. The Greek term as well implies the idea of some Ganzheit, and hence of some perfection, as is confirmed by Aristotle's use of the kindred words $\tau \epsilon \lambda \epsilon \ell \omega o s$ and $\tau \epsilon \lambda \epsilon \omega o s$.

Aristotle emphasizes that $\tau \ell \lambda \epsilon \iota \iota \iota \upsilon$ is derived from $\tau \ell \lambda \iota \iota \iota$, meaning that which possesses the $\tau \ell \lambda \iota \iota \iota$ (e.g. in Met. Δ , chap. 16. $1021^{b}24-5$, and chap. 24. $1023^{a}34$). He further defines the $\tau \ell \lambda \iota \iota \iota \iota \iota$ as that of which no part is missing (ib. Δ 16. $1021^{b}12$ f., and $\rho assim$). This means that it is there as a complete or whole thing. The $\tau \ell \lambda \iota \iota \iota \iota \iota$, then, is that which possesses wholeness, or perfection. It is consummate.

That τέλος means indeed to Aristotle something like wholeness, perfection, consummateness, or fulfilment, emerges with special clarity from Met. \(\Theta \) 6. 1048b18-36, a short paragraph of outstanding significance. We find there a distinction drawn between two kinds of movements (including human activities): (1) A κίνησις can be, and usually is, ἀτελής, i.e. fails to be in possession of the τέλος. Of such character are all the usual endeavours to attain some aim. While they are taking place, the state after which they are striving has not yet come into existence. They have, by their very nature, some part of themselves outside themselves. (2) There exist a few extraordinary activities whose τέλος is present within them, or rather, in each movement of this kind the $\tau \epsilon \lambda \sigma s$ is identical with the movement itself. Such $\kappa \omega \eta \sigma s$, therefore, is τελεία, and Aristotle prefers to call it ἐνέργεια rather than simply κίνησις, since it is fully active, completely present, with nothing missing, with no potentiality left unrealized. This type of activity, which possesses highest dignity, as is shown also in the tenth book of the Nic. Eth., is represented by ὁρᾶν, φρονεῖν, νοεῖν, εὖ ζῆν, εὐδαιμονεῖν. In these activities the past is a present perfect, identical with the present; there is, in other words, no succession; they exhibit complete presence or existence in every stage. In no phase is there anything lacking. There is perfect fulfilment. We understand why Aristotle can call such an activity ἐντελέχεια as well as ἐνέργεια.

A similar meaning of τέλος occurs in De caelo A 9, where Aristotle speaks of the αἰών as τὸ τέλος τὸ περιέχον τὸν τῆς ἐκάστου ζωῆς χρόνον, οὖ μηδὲν ἔξω κατὰ φύσιν (279°23), and as τὸ τοῦ οὐρανοῦ τέλος καὶ τὸ τὸν πάντα χρόνον καὶ τὴν ἀπειρίαν περιέχον τέλος (ib. 26). This τέλος, again, is an entirety.

Natural processes in the sublunar world, as distinct from $\delta\rho\hat{a}\nu$, $\epsilon\hat{v}\delta a\mu\rho\nu\epsilon\hat{v}\nu$, etc., are successive. They are, in their varying stages, directed by a $\tau\epsilon\lambda$ 0s towards which they are striving. " $A\nu\theta\rho\omega\pi$ 0s $\check{a}\nu\theta\rho\omega\pi$ 0r $\gamma\epsilon\nu\nu\hat{a}$. An actually existing complete being is the cause of the genesis of a new being.

1 Theor. Biol., p. 138. Cf. this paper, p. 51.

Tel phenor If v faithfu occur

faithfu occur a nature it more occurre fulfilme The

have be the sake concept of some is play to be the and had be used to be the sake to be the sake

with repurpose unsuited did not menon some Menon Duckui menon plan. I there is purpose

It is That limplans.3 of his copercept moves

in nature is the plant in the p

the plan outside a animal inorganie works. Teleology does not so much mean the striving after some aim as it means the phenomenon that natural processes are directed from a whole (Ganzheit).

If we understand the $\tau \epsilon \lambda o s$ primarily as the aim or the end in view, we are not faithful to the meaning it had for Aristotle. His assertion that processes in nature occur $\epsilon \nu \epsilon \kappa \delta \tau \nu o s$ is the corollary of his conviction that $\tau \epsilon \lambda o s$ is the leading cause in nature. It means ultimately that things happen for the sake of the $\tau \epsilon \lambda o s$, or, to express it more fully, directed by, and normally leading up to, the $\tau \epsilon \lambda o s$, in a succession of occurrences, each of which happens for the sake of the next, until completion or fulfilment is attained.

The meaning of the word $\tau \ell \lambda os$ is not identical with that of $\ell \nu \epsilon \kappa a$. This seems to have been overlooked in the traditional understanding of teleology, where the for the sake of has acquired the central place, whereas for Aristotle $\tau \ell \lambda os$ is the main concept. His doctrine does not mean primarily that everything happens for the sake of something, let alone of an end in view, but first and foremost that some wholeness is playing the main part in causation. Yet for many centuries $\tau \ell \lambda os$ has been taken to be the end in view. This has led to much vicious thought in the history of biology and has contributed to discrediting Aristotle and all teleology.

Uexküll does not use the term teleology, just as he refuses to use the term Zweck with regard to nature. The reason is that Zweck and Ziel, like the English aim, purpose, end in view, mostly bear to the modern reader a meaning which makes them unsuited for the interpretation of nature as seen by Uexküll, a meaning too which τέλος did not bear to Aristotle. They suggest some consciousness, or, at least, some phenomenon of perception, or, to put it in Uexküll's biological terms, that there should be some Merkzeichen of the aim, that is, the animal should somehow perceive the plan. But consciousness is altogether excluded from animal life. And the perception, or Uexküll's Merken, of which the animal is indeed capable, does not include the phenomenon in question. The animal perceives various data, but it does not perceive the plan. Besides, in the life, for example, of an embryo, where there definitely is a plan, there is as yet no perception at all. We should therefore not think of a plan as of a purpose. Uexküll prefers to describe it as a rule for a series of impulses.

It is for this reason that Uexküll would restrict the term aim to human actions. That living being alone which is a thinking subject has aims, whereas nature has plans.³ His cautious avoidance of terms like teleology and aim is only an expression of his conviction that the animal does not possess thought, and that, while possessing perceptive faculties, it does, nevertheless, in no way perceive the plan, though it moves according to that plan. Not only are the processes of animal life distinct from

tion. All

p in this

its a sys-

s system

that all

ble from,

s perfect,

mmen'.1

r Natur.

can be

roved to

illusion,

Chance,

and of

nd when

eit, and

d words

t which

34). He

21b12 f.,

τέλειον,

n, con-

3b18-36,

drawn

can be,

cter are

e state

y their

extra-

vement

fore, is

ce it is

ty left

n also

εὖ ζην,

resent;

stence

lment.

of the

φύσιν

εριέχον

, etc.,

which

being

γεια.

 $^{^{\}rm I}$ Just as in Aristotle. Nature lacks $vo\bar{v}s$. $\tau\epsilon\lambda os$ in nature, consequently, does not imply consciousness.

sciousness.

² The idea of some conscious planning, which almost inevitably creeps in when we speak of purpose, leads, with regard to nature, to two faulty views. (1) Either the animal itself is thought of as being conscious of the purpose even though only possessed of a vague consciousness (or instinct). Thus biology is falsely built up on the analogy of psychology. But the plan in nature is no psychological phenomenon. (2) Or, the planning intelligence is imagined to exist outside the animal. On this interpretation, the animal will be regarded as far too similar to inorganic matter on which an outside agent works. The agent, here, must be God. Thus we commit the two errors of making statements

about something which lies beyond the biologist's experience, by bringing God as an agent into the analysis of nature, and, at the same time, of understating what our subject-matter, living nature, actually shows us; for the evidence shows that it is more than, and different from, lifeless matter. The basic phenomenon of living nature is a plan, inherent in the animal, but not known to it nor perceived by it.

³ It is open to question whether in some higher animal species a certain aiming is to be found. Uexküll, in his *Theoretische Biologie*, does not seem to admit of the possibility, but in *Streifzüge durch die Umwelten*, etc., he says (p. 47): 'Vielleicht erweisen sich später gewisse Handlungen der höchsten Säugetiere als Zielhandlungen, die selbst wieder dem gesamten Naturplan eingeordnet sind.'

mechanical processes, but they must just as sharply be differentiated from human actions. The traditional dualism, then, must give way to a threefold division. There are not only two realms, matter and soul, distinct in their mode of being, but we find three ontologically distinct regions: matter with its mechanical laws, living nature moving according to plans of nature, human life possessed of thought.

heter

postu

insist

more

chair

besäs

the m

will b

illustr

the se

seat b

about

the p

legs.

situat

As lo

regen

anima

two h

inferr

Leben

acting

hower

with blinds

no air

not y

weise

mater

interp

for th

it wer

the fa

teleol

ment

cally

Uexk

ontole

as Ue

witho

mind.

stand

divin

term 1

depend

that is

1 T

T

Aı

If

Before further commenting on this triad I shall try to illustrate Uexküll's distinction between Ziel and Plan.

'On perception of sound in night-moths. It makes no difference whether the sound to which these animals react is produced by a bat or by rubbing a glass stopper. The effect is always the same. Upon one and the same high-pitched sound those species of night-moths which, owing to their bright colour, are easily visible, fly away, whereas those which possess a protective colouring settle down. Thus one and the same *Merkmal* has opposite effects. It is obvious that the two opposite actions are highly planful. There is no idea of the animals' making a distinction or pursuing an aim, as no butterfly has ever caught sight of its own colour. Our admiration for the *Planmässigkeit* that operates here is further increased when we find out that the night-moth's ingenious organ of hearing is constructed in such a way as to react only to the sound made by the bat. Except to this these butterflies are completely deaf.'

If man, by his experiments, brings a disturbance into the normal functioning of nature (e.g., in the above example, by replacing the bat by a glass stopper), the result is a purposeless, even a nonsensical action. Also where man does not interfere, nature shows failures. They are to be explained in a similar way, that is, will be understood if we realize that the animal's actions and motions follow a plan but do not pursue an aim. They will, in case of a disturbance not provided for, continue to be performed in accordance with the plan, which, since the aim is not realized, cannot, by deliberation, be modified so as to suit the new situation which the disturbance has brought about.

Within definite limits, it is true, disturbances can be dealt with, namely where there exists in the animal a special *plan* fit to meet a new situation. So we have found that there is, in fact, a *plan* for repair in each animal, as well as in the embryo a plan for growing into a finished animal. But when the disturbance is one for which no *plan* had provided, the animal is helpless, whereas the mechanic would think out new devices to meet the new situation.

Like Aristotle, Uexkull emphasizes the far-reaching similarity between a planning human workman and his work on the one hand and the plan of nature on the other. In both regions there is causation of the kind for the sake of something, to put it in Aristotle's words, or, to put it in Uexküll's, there is in both a plan at work. Yet, so both authors feel, there is one distinguishing feature. Uexküll expresses it by speaking of Zielhandlung, or zweckmässige Handlung on the part of human planning, while speaking of nothing else than a plan in the case of nature. Aristotle expresses the same difference by stressing that nature lacks vovs, while asserting that the structure for the sake of something as such does not depend on the existence of vovs. He therefore can, for illustration's sake, make the assumption that the wood might contain its agent, the shipbuilding power, within itself, thus equalling nature,3 or that a house might grow up by nature, 4 and also, on the other hand, that natural beings might owe their genesis to craft. Now it is on this point that the modern biologist has attained more farreaching insight. Uexküll likewise raises the question: 'What qualities would be found in a simple article of everyday use, for instance in a chair, if, instead of a foreign and passive Bauplan, which makes the chair depend completely on the carpenter, it possessed a Bauplan of its own, an active one, in other words, if it were not a

¹ Streifzüge durch die Umwellen, etc., p. 49.

² Phys. B 8. 199^b26-8.

³ Ib. 28-30.

⁴ Ib. 199a12.

heteronomous but an autonomous thing?' In answering this problem he is driven to postulating all that similarity between nature and craft on which Aristotle had already insisted. Nevertheless, in the end, he comes to grasp the point of difference, discernible more clearly to modern biological research. The illustration runs thus.

If you cut away one leg from the chair, the carpenter will easily replace it. If the chair were a self-moving natural object ['wenn er einen eigenen aktiven Bauplan besässe'], the result would be the same. Nature itself, or the active plan, would replace the missing leg. If you cut the whole chair lengthwise into two halves, again the result will be the same, whether nature or the carpenter repairs the damage: each of the two halves will be supplemented so as to grow into a whole chair. A very special illustration is needed to show the difference between nature and craft. You only split the seat of the chair. What will happen? The carpenter will join the two halves of the seat by planks to contrive a useful seat. The active plan in nature, however, brings about a very different result. Each half of the seat will regenerate in accordance with the plan. The result will be a monstrous chair, with one back, two seats, and eight legs. The cause of this difference is easy to see. The carpenter sees the whole of the situation, whereas the active Bauplan is blind.

An experiment of this kind had in fact been made on the *Plattwurm* or planaria. As long as the experimenter divided it, in whatever way and direction, complete regeneration took place. This seemed to prove *nature's wise guidance*. But when an animal of the same kind was split only up to the middle, it grew into a monster with two heads and one tail. Vulpian, towards the middle of the nineteenth century, inferred from this that there exists no such thing as nature's wise guidance, that the *Lebenskraft*, in which people believed to find the wise architect, was, on the contrary, acting most foolishly. He therefore rejected all vitalistic theories. For Uexküll, however, this experiment, properly interpreted, shows the specific structure of nature with its definite *plans*. Nature is unmechanical, yet, in a way, blind, but with a blindness different from that of mechanical causation. In nature there are *plans* but no aiming. There is no conscious insight into the whole of the situation. Vulpian had not yet been able to grasp the depth of this problem. 'Für ihn gab es entweder einen weisen Tischler oder den physikalischen Zufall.'²

This last sentence exposes the old belief in the duality of the world as spiritual and material. For the wise carpenter represents a teleological, or rather psychological, interpretation of the phenomenon in question, whereas physical Chance here stands for the mechanical explanation according to the law of matter. Mechanical laws, as it were, do not mind what they bring about: they leave the result to Chance. While the favourable results of the first experiments seemed to prove nature to work teleologically (and this appeared at that time to imply an aiming), the last experiment with its unfavourable result made Vulpian believe that nature worked mechanically and blindly after all, following the vis a tergo, leaving the result to Chance. Uexküll thinks he is solving the problem by acknowledging a third and intermediary ontological region. The causation found in nature is sui generis. A plan is at work, as Uexküll puts it, or, in Aristotle's words, a causing for the sake of the τέλος, but without voûs. The understanding of this third region causes difficulties to the modern mind. Most interpreters hold that teleology implies a conscious agent. From a theological standpoint, therefore, it will often be readily accepted as a demonstration of the wise divine guidance. On the other hand, the strict biologist, who rightly feels that he

the result re, nature iderstood of pursue erformed deliberbrought

m human

on. There

g, but we

ws, living

küll's dis-

the sound

per. The

se species

fly away,

and the

ctions are

rsuing an

on for the

that the

ct only to

ioning of

deaf.'1

it.

ly where ve found yo a plan which no out new

planning he other. put it in Yet, so speaking g, while esses the tructure herefore its agent, ght grow r genesis nore farrould be foreign enter, it

e not a

¹ Theor. Biol., p. 214. Aktiver Bauplan is a term meant to characterize nature. Machines depend on a foreign and passive plan, whereas animals possess a plan of their own, and one that is active. A chair, e.g., possesses a foreign

and passive plan which makes the chair entirely depend on the carpenter. The chair, therefore, is a *Heteronom*, whereas the living being is an *Autonom*. The difference is explained, *Theor. Biol.*, p. 200, and *passim*.

² Ib., p. 215.

ought not to go beyond the phenomena, shrinks from teleology for the same reason for which the religious mind feels attracted to it. The cautious historian of philosophy, however, has to admit that Aristotle, while expounding the for the sake of the τέλος, does not-or hardly ever does-speak of God as the agent of planning. Sir David Ross is doubtless right in stating that Aristotle neither means that nature itself is conscious, nor does he, with any definiteness, make God the conscious planner of the teleological structure of the world. But when Sir David says that for this very reason the doctrine of teleology is unsatisfactory, since a purpose or end without one who has it in view is an absurd concept, we cannot share in this criticism. Would not Aristotle admonish us to save the phenomena? Can we declare a concept as absurd, while something in reality corresponds to it? The fact that the conception of a plan without a noticeable planner has hitherto been given no place in our thought can hardly be proof that it is valueless. In the realm of being, if not yet in the realm of thought, the phenomenon of a plan without an observable planner does appear to exist. Should we not, then, have to produce a concept which faithfully represents this reality? I venture to think that Aristotle would uphold this position just as strongly as Uexküll does, and that in Phys. B as well as, again and again, in his other works,2 he in fact expresses this conviction.

HELENE WEISS.

ETY

in wl

one :

But

of th

ques

pp. I

(as I

addi

my f evide in th also 'Ave sense and t has r loan theo πόντο deriv Sea: tion to ex πόντι use i narre a res Hero Prop is for for s only

T

WESTFIELD COLLEGE, LONDON.

I W. D. Ross, Aristolle, p. 186: The notion of unconscious teleology is, it is true, unsatisfactory. If we are to view action not merely as producing a result but as being aimed at producing it, we must view the agent either as imagining the result and aiming at reaching it, or as the tool of some other intelligence which through it is realizing its conscious purposes. Unconscious teleology implies a purpose which is not the

purpose of any mind, and hence not a purpose at all. But Aristotle's language suggests that he (like many modern thinkers) did not feel this difficulty, and that, for the most part, he was content to work with the notion of an unconscious purpose in nature itself.'

² With special emphasis in De Partibus Animalium A 1

THE NAME OF THE EUXINE PONTUS AGAIN

ETYMOLOGY, especially that of an ancient language like Greek, is not as a rule a field in which one expects to get conclusive demonstration; and between rival explanations one is often provided with a choice which cannot be made with much confidence. But despite this I think that I should reply to the article by W. S. Allen on 'The Name of the Black Sea in Greek' (C.Q. xli (1947), pp. 86-8), which has raised again the question dealt with in my article 'The Name of the Euxine Pontus' (C.Q. xxxiv (1940), pp. 123-8). This is not so much because I do not feel satisfied with Allen's explanation (as I do not), as because this particular etymology has considerable historical, in addition to linguistic, interest.

The main points made by Allen are these:

- (i) Though it is true to say that there is no direct evidence of the use of the adjective aχšaēna in Avestan to describe the Black Sea, yet it is possible to infer such a use for Old Iranian, on the basis of an emendation of a text in Middle Persian (date not before ninth century A.D.).
- (ii) It is probable that in early times an Iranian tongue, not far removed linguistically from Avestan, was spoken on the north shore of the Black Sea. It was from the speakers of such a tongue that Aeolic traders took the word which in their language became ἄξενος.
- (iii) The form of the word ἄξενος (instead of ἄξεινος) does not prove that the Greeks did not borrow from aχšaēna: the dialect of the borrowers had the form ἄξενος, and so they naturally used it.

With the view expressed at (iii) I agree, and readily withdraw the relevant part of my former argument. But I doubt whether the other remarks help us very much. The evidence for the use of a word axšaēna (or something like it), applied to the Black Sea, in the supposed Iranian tongue in prehistoric times, is remarkably ingenious; but it is also very tenuous. I stated previously, in opposing the Avestan derivation, that 'Avestan is a long way from Greek in historical times': this I meant literally, in the sense that the geographical separation of the peoples speaking those tongues was great, and threw doubt on the likelihood of the contact which would produce the loan. Allen has made a prima-facie improvement in the generally accepted version by taking the loan from a people more likely to have contact with the Greeks. But I think that the theory breaks down when we turn from these highly speculative matters to consider πόντος, with which we are on much more certain ground. Here is a word whose derivation is as nearly sure as can be; which has special association with the Black Sea; and yet whose meaning 'sea' is in urgent need of explanation. Such an explanation I tried to give in 'The Name of the Euxine Pontus', which was designed primarily to explain πόντος, and only secondarily εὖξεινος and ἄξενος. My explanation was that πόντος, which must have originally meant 'way', came to mean 'sea' by reason of its use in the phrase ὁ ἄξενος πόντος: and that by contrast the 'way' proper was over the narrow waters of the Bosporus and Hellespont, and of the Propontis in between. As a result of this theory a number of other curious facts can be explained, viz. (i) that in Herodotus πόντος is applied once to the Propontis and once to the region around the Propontis; (ii) that Photius and Suidas call the Propontis ὁ πόντος; (iii) that the word is found in the same area in the name Ελλήσποντος; and (iv) that πόντος is the name for specific seas, both in Homer and in Classical Greek (prose and verse), but is only poetical in the general sense 'sea' (on this last point see 'IE, *PENT- and its

me reason hilosophy, the τέλος, Sir David re itself is mer of the ery reason to one who Would not as absurd, of a plan ought can e realm of appear to

a purpose

EISS.

epresents

n just as

his other

t feel this rt, he was an uncon-

tibus Ani-

Derivatives', C.Q. xxxv (1941), p. 96). Now the derivation of ἄξενος from an Iranian loan-word does not help us to explain these facts: it shows neither how πόντος has special connexion with the Propontis and Bosporus area, nor why (if πόντος still meant 'way' at the time of the loan) πόντος was chosen to be associated with the new word ἄξενος to describe the Black Sea. And if it is answered that πόντος already meant 'sea' when ἄξενος was first attached to it, the old difficulty arises of explaining how πόντος ever came to mean 'sea' at all.

The word $\pi \acute{o} \nu \tau o s$ remains the most serious objection to Vasmer's theory. The name \acute{o} $\acute{a} \xi \epsilon \nu o s$ $\pi \acute{o} \nu \tau o s$ is as a whole a most curious one: and it must be explained in its entirety. To deal with $\acute{a} \xi \epsilon \nu o s$ by itself is not so much putting the cart before the horse as doing without the horse altogether.

A. C. MOORHOUSE.

University College, Swansea.

² The supporters of Vasmer seem to me obliged to take this view. For πόντος is established with the meaning 'sea' (both generally and for specific seas) in Homer: but we can hardly suppose that the first Aeolic traders were dealing with the Scythians (or allied people) within the Euxine much, if at all, before his time. Apollodorus, quoted by Strabo 7. 3. 6 and 12. 3. 26, took the

view that Homer was ignorant of the coast of the Euxine, both of the southern (Paphlagonian) part and of the rest, adding ἄπλουν εἶναι τότε τὴν θάλατταν (7. 3. 6). This is probably too extreme a view: but it seems in any case unlikely that there was any regular trade as early as the ninth century B.C.

SUPPLEMENTARY NOTE ON THE NAME OF THE BLACK SEA

Since my article in C.Q. xli, pp. 86 ff., a further discussion of the problem has come to my notice. H. Jacobsohn, in an article entitled $\Sigma \kappa \nu \theta \nu \kappa \dot{\alpha}$ in Zeitschr. f. vergleichende Sprachforschung, liv, pp. 254 ff., anticipates my point that the Greek Afe(ι)vos is borrowed not from Avestan but from some other Iranian language, probably Scythian. He also makes out an attractive case, based on the word $\pi a \rho \dot{\alpha} \delta \epsilon \iota \sigma \sigma s$, for considering the Iranian pronunciation at the period when the loan occurred to have been $a \chi \dot{s} \bar{e} n a a$, with \bar{e} from original a i. It is unfortunate that he should have supported his case with the argument that a form $a \chi \dot{s} \dot{s} a i n a$ is too remote from Greek $\ddot{a} \xi \epsilon \iota \nu \sigma s$ (where $\epsilon \iota = \bar{e}$, not ϵi) for the identification to have taken place: this insistence on complete homonymy in folk-etymology I have already criticized in discussing Moorhouse's article; and in any case it is by no means certain that $\ddot{a} \xi \epsilon \iota \nu \sigma s$ is the earliest form of the name in Greek.

I would also take this opportunity to add a note on the acceptability of Freiman's emendation. The stemma of the *Bundahiśn MSS*. (for which I am indebted to Dr. W. B. Henning) suggests that any divergence in K. 20 from the general consensus of the other manuscripts is likely to be an innovation; since this is the manuscript most favourable to Freiman's conjecture, some further doubt is cast on his claims.

W. S. ALLEN.

Iranian

ros has
I meant
w word
ant 'sea'
πόντος

e name
i in its
he horse

USE.

coast of agonian)

τότε τὴν

ktreme a

nat there

ne ninth

ome to ichende i)vos is ythian.

E

ythian. idering $a\chi \dot{s} \bar{e} n a$, se with $u = \bar{e}$,

onymy and in Greek. iman's

to Dr.
insus of
ot most

LEN.





The Loeb Classical Library

Edited by

T. E. PAGE, C.H., LITT.D.

E. CAPPS, PH.D., LL.D. W. H. D. RO

Founded by JAMES LOW

Back volume Foolscap Svo, 400-700 pages. Clear type. Cloth, 10s, not; leather, 12s. 6d. net

A series of Greek and Latin Texts with English Translations on the opposite page. The series is to contain all that is best in Greek and Latin Literature, from the time of Homer to the end of the Wessern Empire.

'We shall never be independent of our Loeb.'-Times Literary Supplement.

NEW VOLUMES, 1947

LATIN

368-9 QUINTUS CURTIUS, HISTORY OF ALEXANDER, Two volumes, Translated by J. C. Rolfe

GREEK

375 DIODORUS SICULUS. Twelve volumes. Vol. IV. Books IX-XII. 40. Translated by C. H. Oldfather.

376 DIO CHRYSOSTOM. Five volumes. Vol. IV. Discourses XXXVII-LX. Translated by H. Lamar Crosby.

WILLIAM HEINEMANN, LTD.

Windmill Press, Kingswood, Tadworth, Surrey

HARVARD UNIVERSITY PRESS, Cambridge, Mass., U.S.A.

THE WORLD'S GREATEST BOOKSHOP

FOYLES

New & secondhand Books on every subject. Stock of 3 million volumes.

We BUY Books, too !

119-125 Charing Cross Road London, W.C.2

> Gerrard 5660 (16 lines) Open 9-6 (Inc. Sats.)

CLASSICAL BOOKS

As of all subjects, we hold a very large stock of Greek and Latin Classics, both new and secondhand, and we will gladly answer all inquiries.

Good prices are always given for standard editions of Classical Texts, particularly for Dictionaries, Loeb Library, Cambridge Ancient History, &c.

W. HEFFER & SONS LIMITED Petty Cury, Cambridge



Euripides and Dionysus

R. P. WINNINGTON INGRAM

A full-length interpretation of the Bacchae of Euripides, the first in English for many years. After a discussion of the various conflicting views already put forward the author proceeds, in a running commentary on the play, to argue his case for a new view of the significance which Euripides attached to Dionysus and its bearing on the understanding of the work.

15s. net

The Lyric Metres of Greek Drama

A. M. DALE

An important contribution to scholarship in a field previously little explored by English scholars. Miss Dale's book begins with an introduction and a chapter on classification and terminology and closes with chapters on strophic construction and on performance. Nine intervening chapters deal in detail with the various types of metre, which are also classified in a synopsis.

18s. net

The Style of Aeschylus

F. R. EARP

Using the same methods as those employed in his earlier study of *The Style of Sophocles*, Mr Earp deals with certain aspects of the work and style of Aeschylus and the light they throw on the mind and purpose of the writer.

12s. 6d. net

CAMBRIDGE UNIVERSITY PRESS

